COLOR MONITOR
SERVICE MANUAL

CHASSIS NO. : CL-42
FACTORY MODEL: L1800FPK
MODEL: 1800FP

CAUTION
BEFORE SERVICING THE UNIT,
READ THE **SAFETY PRECAUTIONS** IN THIS MANUAL.

CONTENTS

SPECIFICATIONS

1. LCD CHARACTERISTICS

Type	: TFT Color LCD Module
Size	: 18.1inch(45.974cm diagonal)
Pixel Pitch	: 0.2805(H) x 0.2805(V)
Color Depth	: 8-bit, 16,777,216 colors
Electrical Interface	: LVDS
Surface Treatment	: Anti-Glare, Hard Coating(3H)
Operating Mode	: Normally Black
Backlight Unit	: Six-CCFL (Cold Cathode Fluorescent Lamp)

2. OPTICAL CHARACTERISTICS

2-1. Viewing Angle by Contrast Ratio ≥ 10

Left : -60° min., -80°(Typ)
Right : +60° min., +80°(Typ)
Top : +60° min., +80°(Typ)
Bottom : -60° min., -80°(Typ)

2-2. Luminance : 200(min), 250(Typ)

2-3. Contrast Ratio : 200(min), 350(Typ)

3. SIGNAL (Refer to the Timing Chart)

3-1. Sync Signal
Type : Separate Sync,SOG, Composite Sync, Digital

3-2. Video Input Signal

1) Type	: R, G, B Analog
2) Voltage Level	: 0~0.70 V
a) Black	: 0.0 Vp-p
b) 128 Gray	: 0.35 Vp-p
c) Full White	: 0.70 Vp-p
3) Input Impedance	: 75 Ω

3-3. Operating Frequency

Horizontal	: 30 ~ 83 kHz
Vertical	: 56 ~ 75 Hz

4. POWER SUPPLY

4-1. Power
AC 100~240V, 50/60Hz , 1.0A

4-2. Power Consumption

MODE	H/V SYNC	VIDEO	POWER CONSUMPTION	LED COLOR
POWER ON (NORMAL)	ON/ON	ACTIVE	less than 55 W	GREEN
STAND-BY	OFF/ON	OFF	less than 3 W	AMBER
SUSPEND	ON/OFF	OFF	less than 3 W	AMBER
DPM OFF	OFF/OFF	OFF	less than 3 W	AMBER
POWER SW OFF	-	-	less than 2 W (at 120V)	OFF

5. ENVIRONMENT

5-1. Operating Temperature: 10°C~35°C (50°F~95°F) (Ambient)
5-2. Relative Humidity : 10%~80% (Non-condensing)
5-3. MTBF : 50,000 Hours(Min)

6. DIMENSIONS (with TILT/SWIVEL)

Width	: 406 mm (15.98")
Depth	: 223 mm (8.78')
Height	: 431 mm (16.97")

7. WEIGHT (with TILT/SWIVEL)

Net. Weight	: 7.8kg (17.19 lbs)
Gross Weight	: 9.5kg (20.94 lbs)

PRECAUTION

WARNING FOR THE SAFETY-RELATED COMPONENT.

- There are some special components used in LCD monitor that are important for safety. ***These parts are marked ⚠on the schematic diagram and the replacement parts list.*** It is essential that these critical parts should be replaced with the manufacturer's specified parts to prevent electric shock, fire or other hazard.
- Do not modify original design without obtaining written permission from manufacturer or you will void the original parts and labor guarantee.

TAKE CARE DURING HANDLING THE LCD MODULE WITH BACKLIGHT UNIT.

- Must mount the module using mounting holes arranged in four corners.
- Do not press on the panel, edge of the frame strongly or electric shock as this will result in damage to the screen.
- Do not scratch or press on the panel with any sharp objects, such as pencil or pen as this may result in damage to the panel.
- Protect the module from the ESD as it may damage the electronic circuit (C-MOS).
- Make certain that treatment person's body are grounded through wrist band.
- Do not leave the module in high temperature and in areas of high humidity for a long time.
- The module not be exposed to the direct sunlight.
- Avoid contact with water as it may a short circuit within the module.
- If the surface of panel become dirty, please wipe it off with a softmaterial. (Cleaning with a dirty or rough cloth may damage the panel.)

⚠ CAUTION

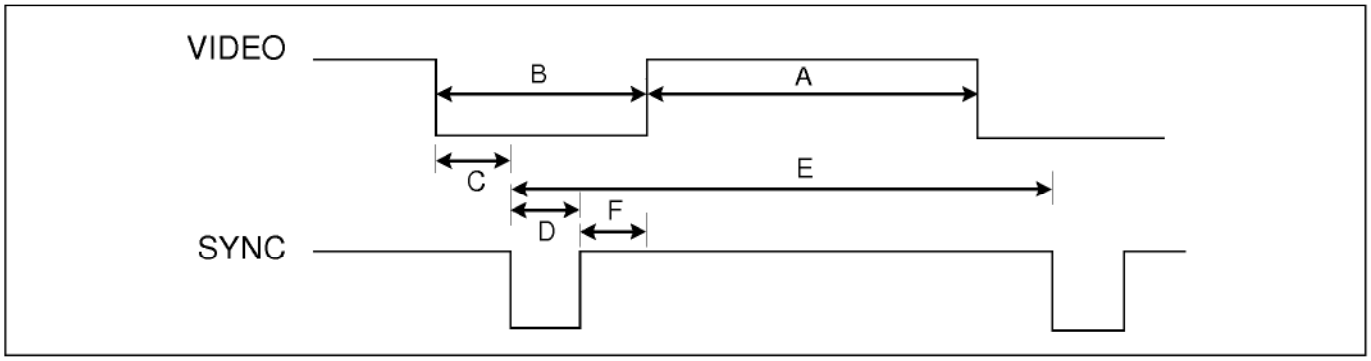
Please use only a plastic screwdriver to protect yourself from shock hazard during service operation.

⚠ WARNING

BE CAREFUL ELECTRIC SHOCK !

- If you want to replace with the new backlight (CCFL) or inverter circuit, must disconnect the AC adapter because high voltage appears at inverter circuit about 650Vrms.
- Handle with care wires or connectors of the inverter circuit. If the wires are pressed cause short and may burn or take fire.

TIMING CHART



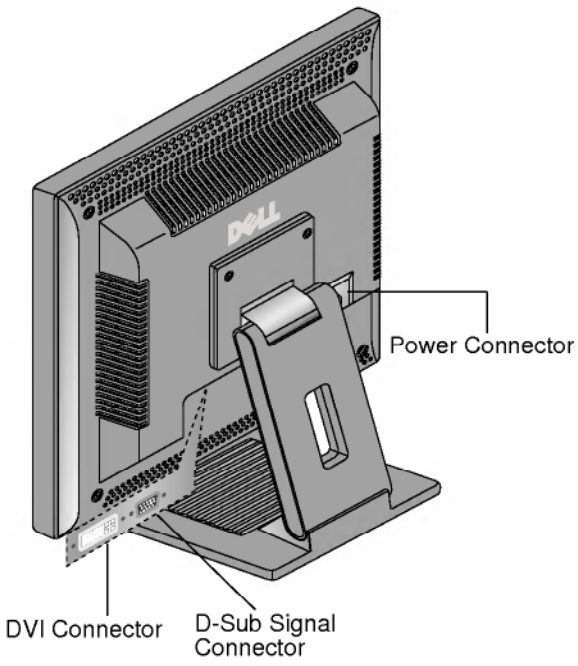
<< Dot Clock **(MHz),** Horizontal Frequency **(kHz)**, Vertical Frequency **(Hz)**, Horizontal etc... **(µs)**, Vertical etc... **(ms)** >>

Mode	H/V Sort	Sync Polarity	Dot Clock	Frequency	Total Period (E)	Video Active Time (A)	Front Porch (C)	Sync Duration (D)	Back Porch (F)	Resolution
1	H	+	25.175	31.469	800	640	16	96	48	**640x350 70Hz**
	V	–		70.09	449	350	37	2	60	
2	H	–	28.321	31.468	900	720	18	108	54	**720x400 70Hz**
	V	+		70.08	449	400	12	2	35	
3	H	–	25.175	31.469	800	640	16	96	48	**640x480 60Hz**
	V	–		59.94	525	480	10	2	33	
4	H	–	31.5	37.5	840	640	16	64	120	**640x480 75Hz**
	V	–		75	500	480	1	3	16	
5	H	+	40.0	37.879	1056	800	40	128	88	**800x600 60Hz**
	V	+		60.317	628	600	1	4	23	
6	H	+	49.5	46.875	1056	800	16	80	160	**800x600 75Hz**
	V	+		75.0	625	600	1	3	21	
7	H	+/–	57.283	49.725	1152	832	32	64	224	**832x624 75Hz**
	V	+/–		74.55	667	624	1	3	39	
8	H	–	65.0	48.363	1344	1024	24	136	160	**1024x768 60Hz**
	V	–		60.0	806	768	3	6	29	
9	H	–	78.75	60.123	1312	1024	16	96	176	**1024x768 75Hz**
	V	–		75.029	800	768	1	3	28	
10	H	+/–	108.0	67.500	1600	1152	64	128	256	**1152x864 75Hz**
	V	+/–		75.000	900	864	1	3	32	
11	H	+/–	92.978	61.805	1504	1152	18	134	200	**1152x900 65Hz**
	V	+/–		65.96	937	900	2	4	31	
12	H	+	108.0	63.981	1688	1280	48	112	248	**1280x1024 60Hz**
	V	+		60.02	1066	1024	1	3	38	
13	H	+	135.0	79.976	1688	1280	16	144	248	**1280x1024 75Hz**
	V	+		75.035	1066	1024	1	3	38	

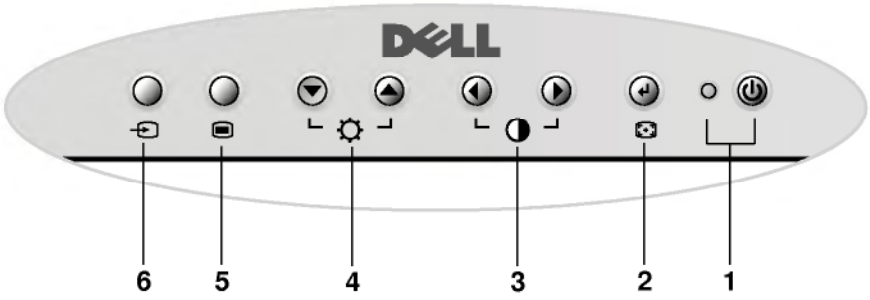
OPERATING INSTRUCTIONS

FRONT VIEW

REAR VIEW



Front Control Panel



1. **Power Button and LED Indicator**
   Turn the display on/off and indicate the status of power management.

2. **Select/Auto Button**
   Use this button to enter a selection in the On Screen Display. Automatically adjust vertical position, horizontal position, pixel clock and phase.

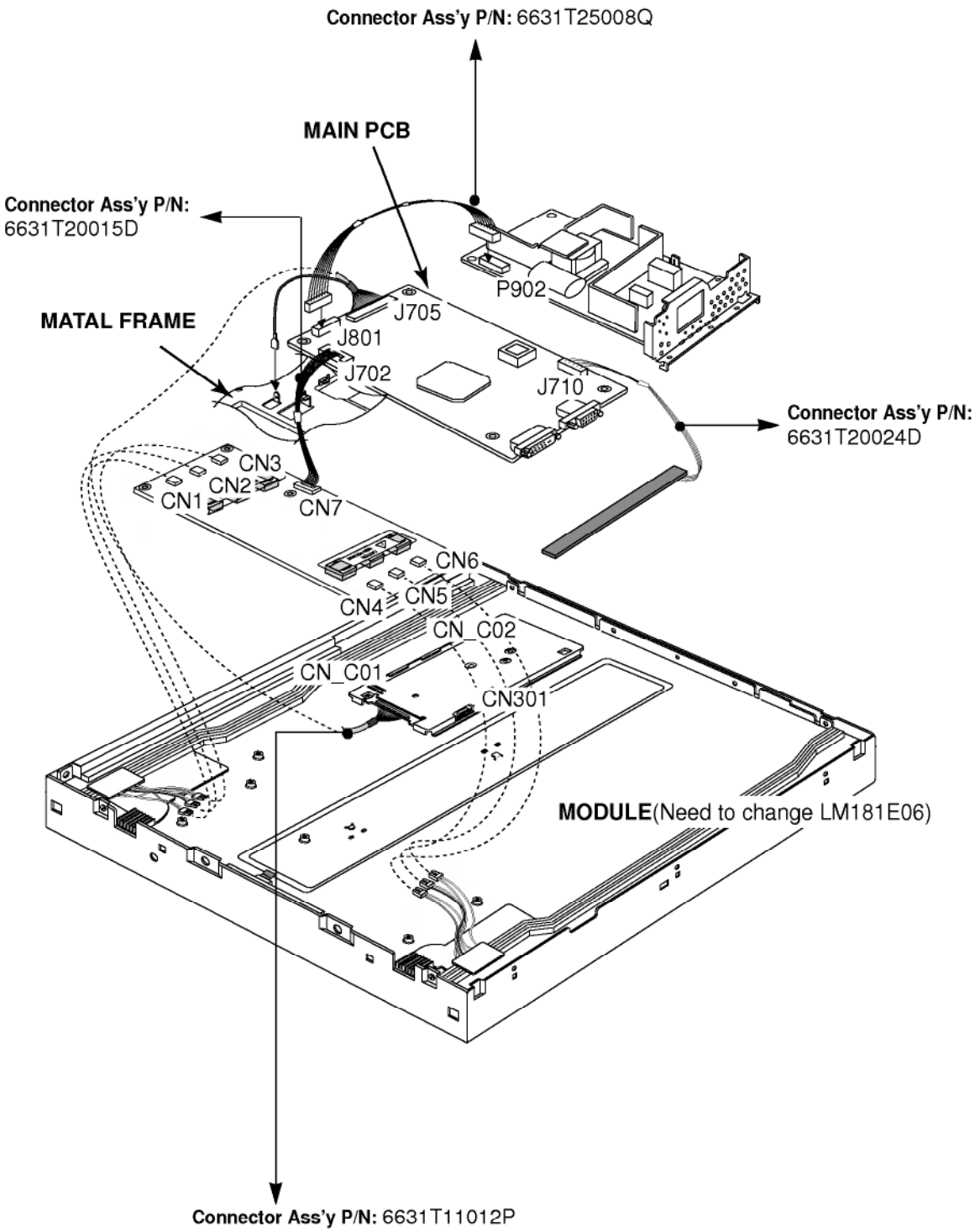
3. **Left/Right arrow Buttons**
   Use these buttons to choose or adjust items in the On Screen Display and activates Hot Key function for contrast adjustment.

4. **Up/Down arrow Buttons**
   Select between OSD items and activates "Hot key" function for brightness adjustment.

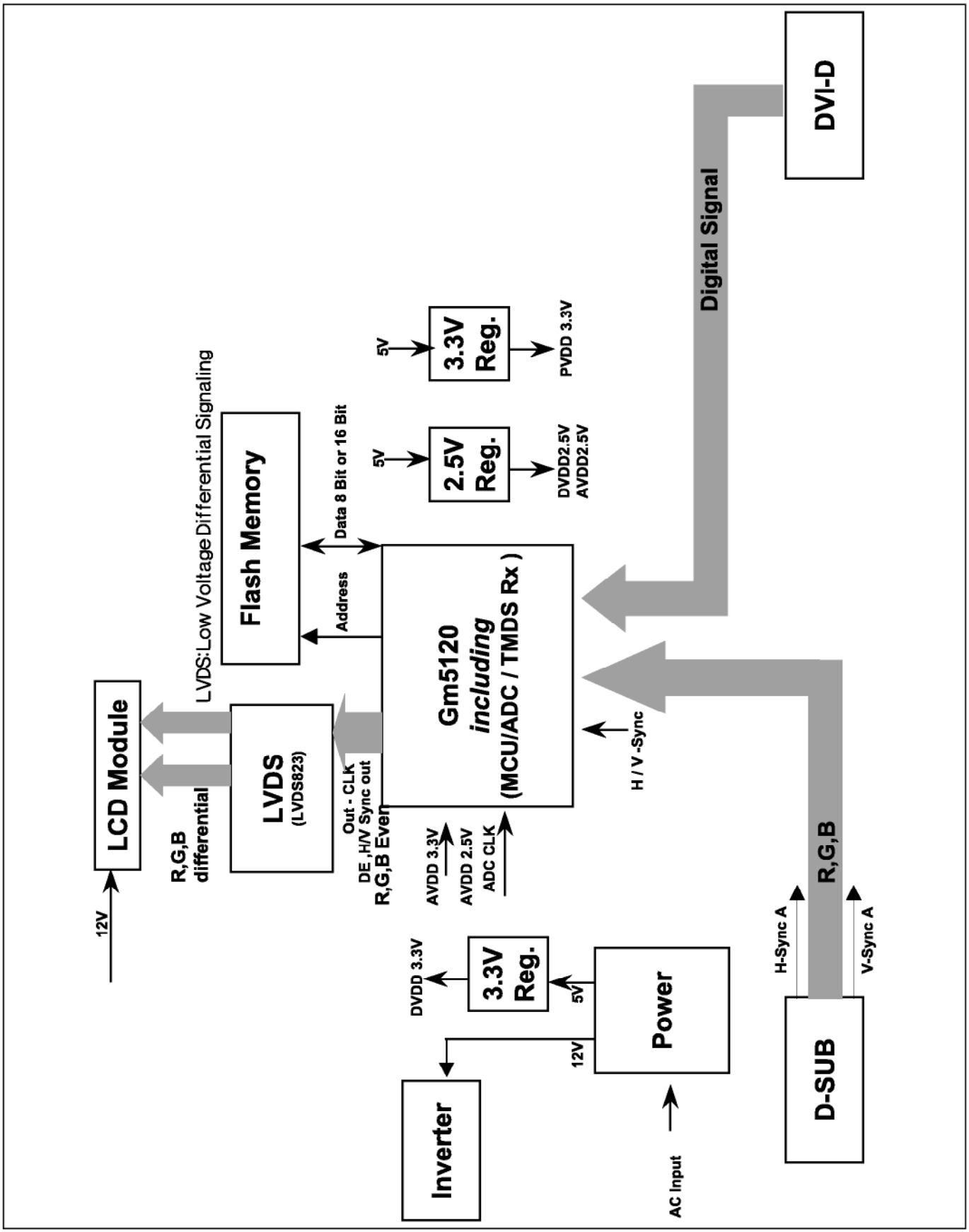
5. **Menu Button**
   Use this button to enter or exit the On Screen Display.

6. **Input Selection Button**
   Use this button to make D-sub or DVI connector active.
   This feature is used when two computers are connected to the display. The default setting is D-sub.

WIRING DIAGRAM



BLOCK DIAGRAM



DESCRIPTION OF BLOCK DIAGRAM

1. Input signal switching part.

There are two inputs which are analog and digital input.
They come from each 15 pin D-Sub and 24 pin DVI-D connector.

2. Video Controller Part.

This part amplifies the level of video signal for the digital conversion and converts from the analog video signal to the digital video signal using a pixelclock.
The pixel clock for each mode is generated by the PLL.
The range of the pixel clock is from 25MHz to 135MHz.

This part consists of the Scaler, Flash-ROM IC which stores program data,Reset IC.
The Scaler gets the video signal converted analog to digital, interpolates input to1280 X 1024 resolution signal and outputs R, G, B signal to transmitter.

The controlled data of each modes and user setting is stored in EEPROM
Especially Micom/pre-amp / ADC / Video controller are merged to one chip 'Gm5120' by Genesis. .

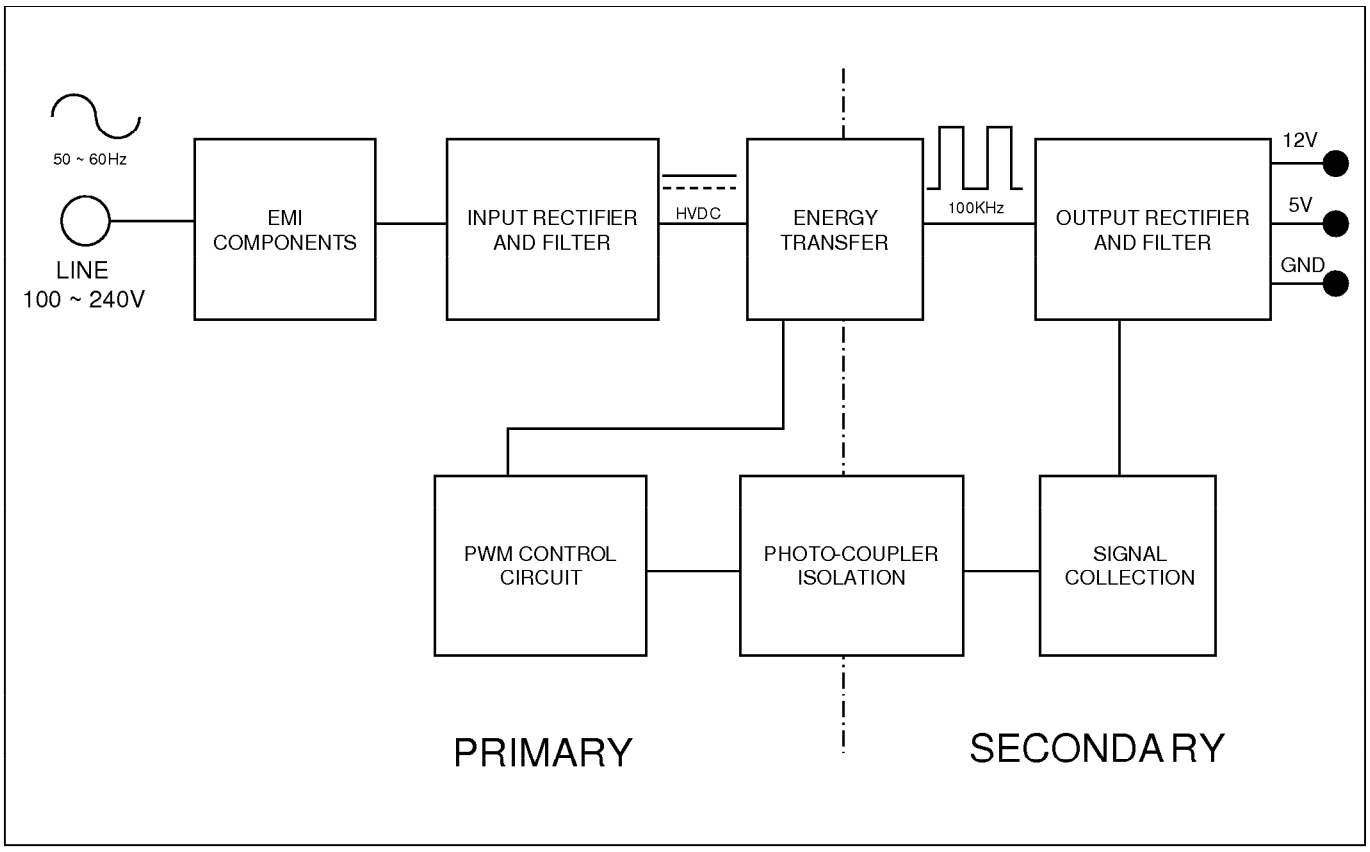
3. Display Data Transmitter Part.

This part transmit digital signal from the Scaler to the receiver of module.

4. Power Part.

This part consists of the one 5V, one 3.3V and one 2.5 regulators to convert power which is provided 12V, 5V in Power Board.
12V is provided for LCD Panel.
Also, 5V is converted 3.3V and 2.5V by regulator. Converted power is provided for IC in the main board.

POWER BOARD



OPERATION DESCRIPTION_POWER

1. EMI components.

This part contains of EMI components to comply with global marketing EMI standards like FCC, VCCI CISPR, the circuit included a line-filter, across line capacitor and of course the primary protection fuse.

2. Input rectifier and filter.

This part function is for transfer the input AC voltage to a DC voltage through a bridge rectifier and a bulk capacitor.

3. Energy Transfer.

This part function is transfer the primary energy to secondary through a power transformer.

4. Output rectifier and filter.

This part function is to make a pulse width modulation control and to provide the driver signal to power switch, to adjust the duty cycle during different AC input and output loading condition to achive the dc output stablize, and also the over power protection is also monitor by this part.

5. Photo-Coupler isolation.

This part function is to feed back the dc output changing status through a photo transistor to primary controller to achive the stablized dc output voltage.

6. Signal collection.

This part function is to collect the any change from the dc output and feed back to the primary through photo transistor

ADJUSTMENT

All adjustment are thoroughly checked and corrected when the monitor leaves the factory, but sometimes several minor adjustment may be required.
Adjustment should be following procedure and after warming up for a minimum of 10 minutes.

• Alignment appliances and tools.
- IBM compatible PC
- Programmable Signal Generator.
  (eg. VG-819 made by Astrodesign Co.)
- E(E)PROM with each mode data saved.

1. Adjustment Start

1) Display any pattern at any Mode.
2) Run alignment program for L1800FPKon the IBM compatible PC.
3) Select EEPROM → ALL INIT command and Enter.
4) This will make all data to default state.
5) Select COMMAND → PRESET START command and Enter.

2. Adjustment for White Balance

1) Display Black pattern at SXGA/60Hz.
2) Set External Bright to MAX position and Contrast to MAX Position.
3) Select PRESET START → BIAS CAL command and Enter.
4) No attempt to manually adjust, BIAS data is automatically adjusted and saved to the EEPROM.
5) Display Full White pattern at SXGA/60Hz.
6) Select DRIVE CAL command and Enter.
7) 9300K are automatically adjusted and saved to the EEPROM.
8) Select PRESET EXIT command and Enter.

3. Adjustment for EDID

1) Use this procedure only when there is some probelm on EDID data.
2) Connect the D-sub cable.
3) Select EEPROM → EDID(A) WR command and Enter.
4) DVI to D-sub cable.
5) Select EEPROM → EDID(D) WR command and Enter.

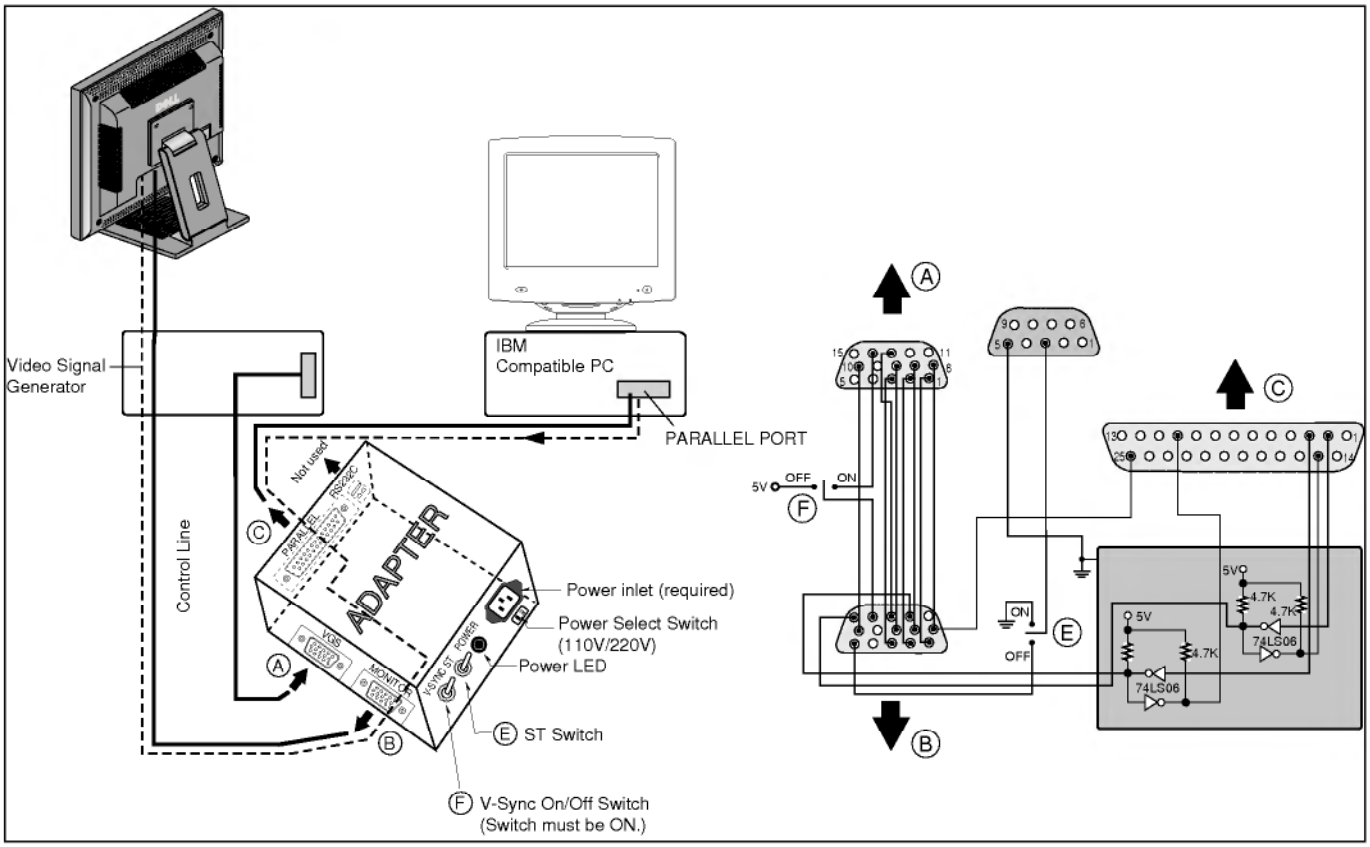
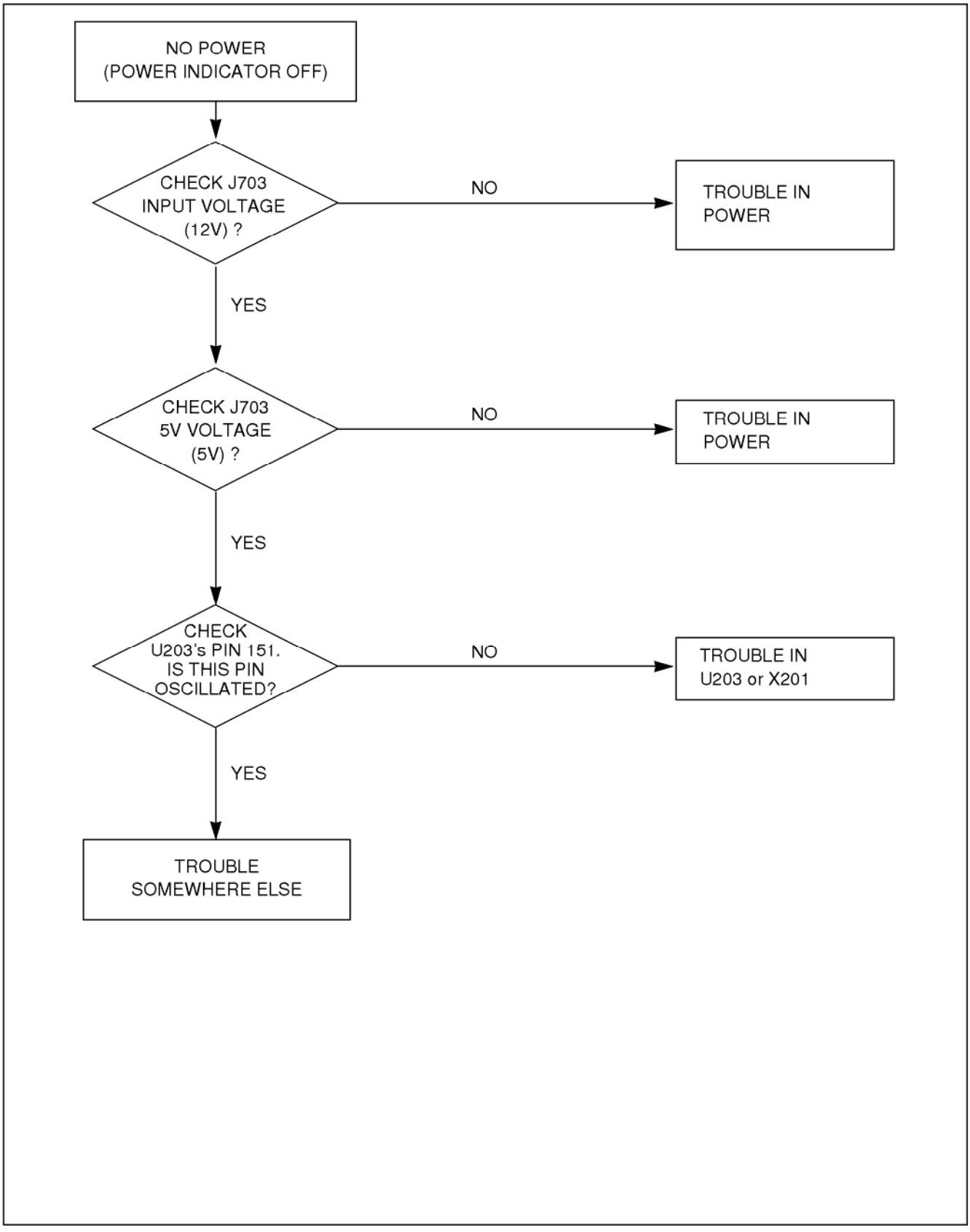


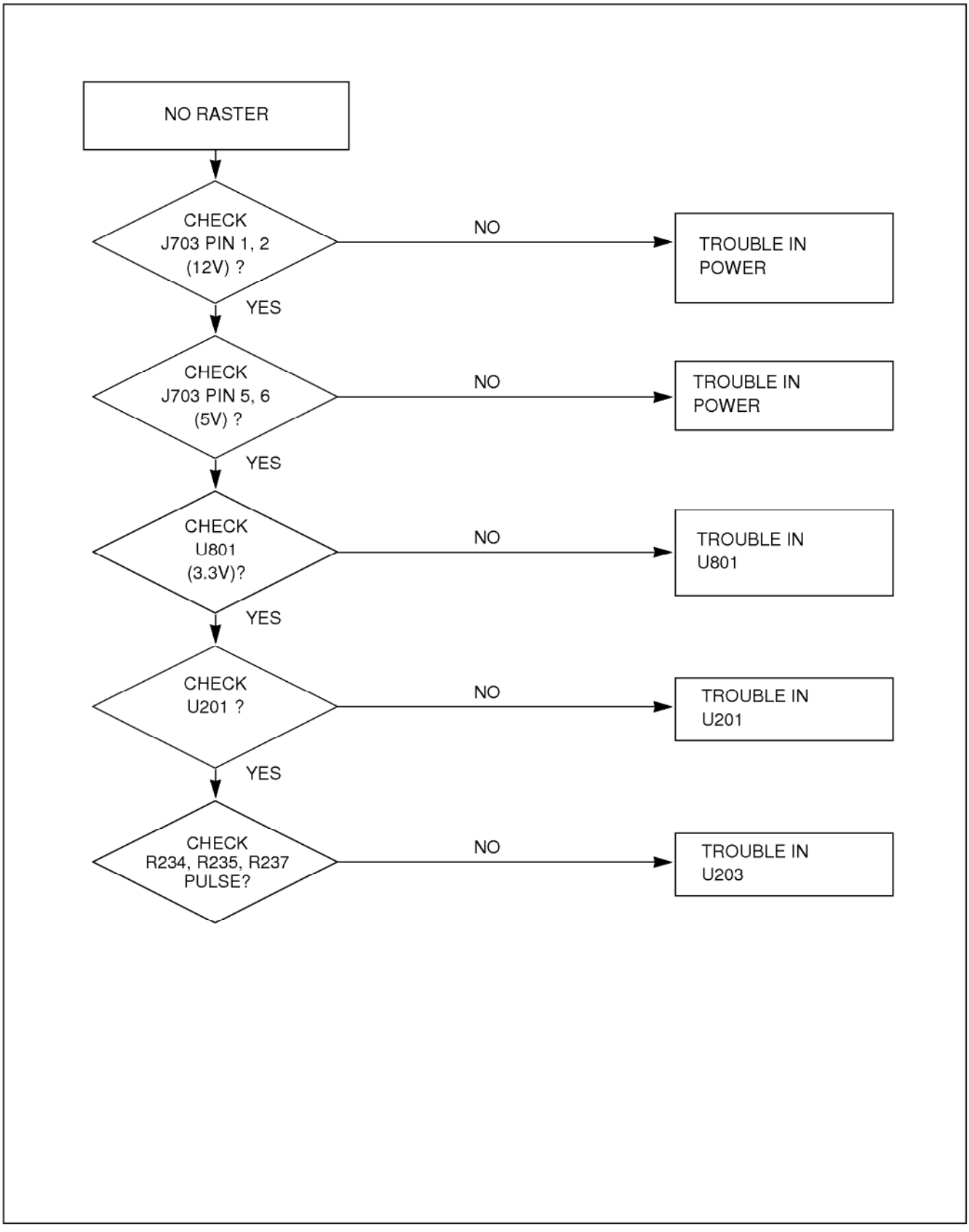
Figure 1. Cable Connection

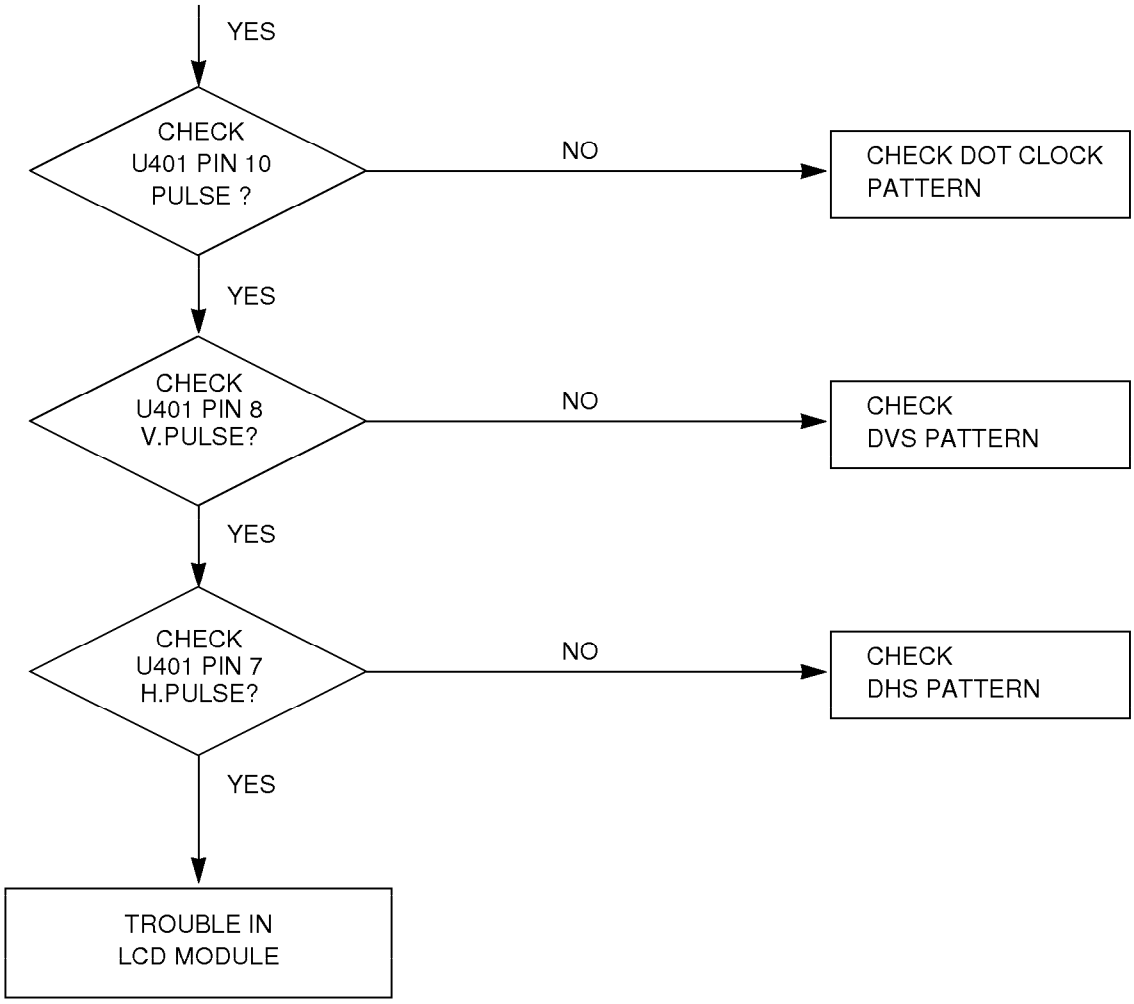
TROUBLESHOOTING GUIDE

1. NO POWER

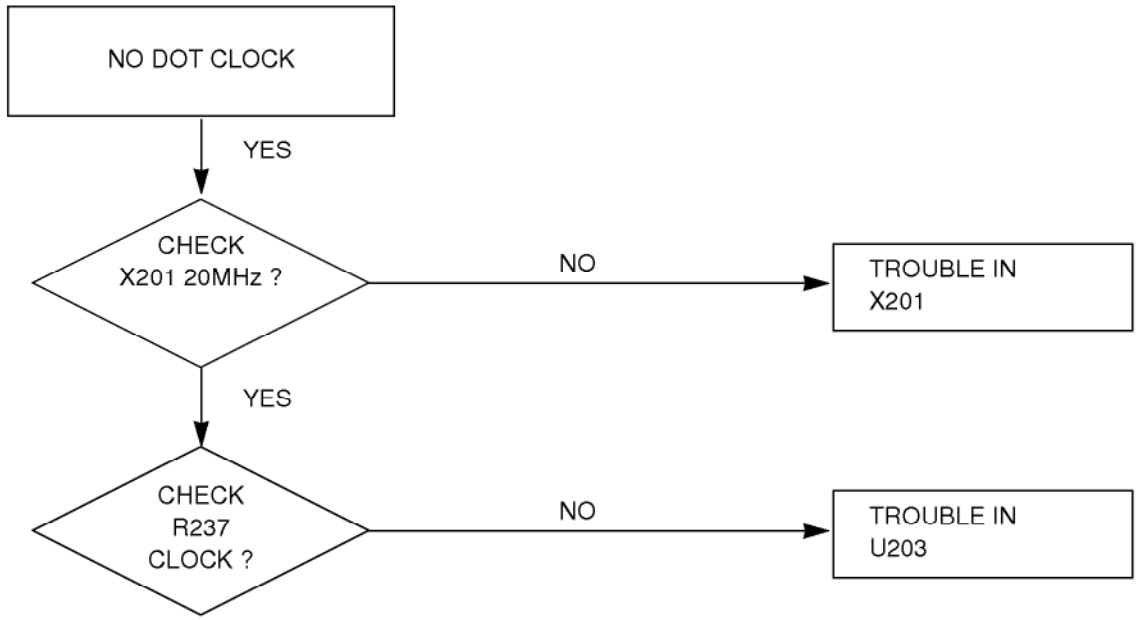


2. NO RASTER

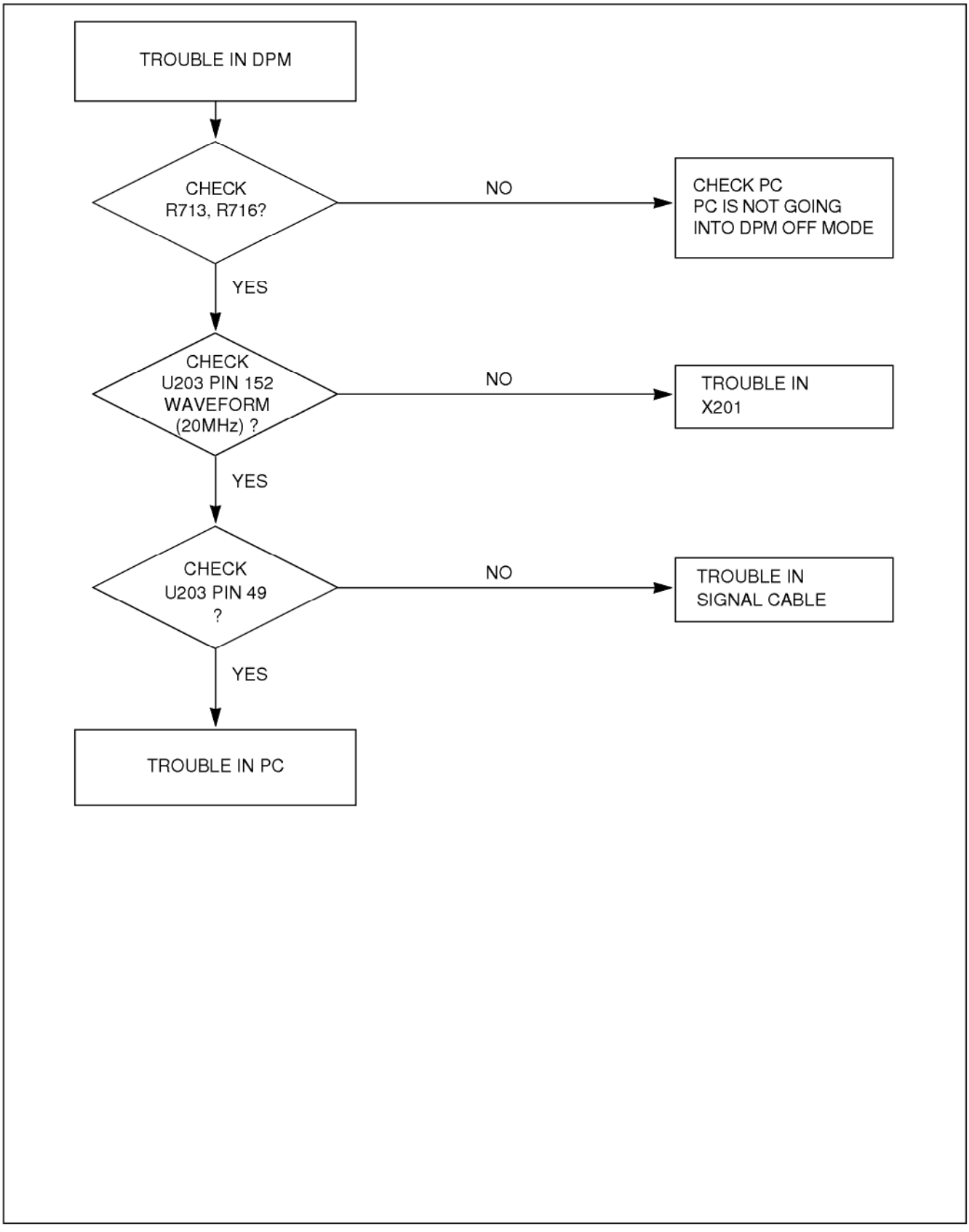

NO RASTER
CHECK J703 PIN 1, 2 (12V) ?
NO
TROUBLE IN POWER
YES
CHECK J703 PIN 5, 6 (5V) ?
NO
TROUBLE IN POWER
YES
CHECK U801 (3.3V)?
NO
TROUBLE IN U801
YES
CHECK U201 ?
NO
TROUBLE IN U201
YES
CHECK R234, R235, R237 PULSE?
NO
TROUBLE IN U203


YES
CHECK
U401 PIN 10
PULSE ?
NO
CHECK DOT CLOCK
PATTERN
YES
CHECK
U401 PIN 8
V.PULSE?
NO
CHECK
DVS PATTERN
YES
CHECK
U401 PIN 7
H.PULSE?
NO
CHECK
DHS PATTERN
YES
TROUBLE IN
LCD MODULE

3. NO CLOCK (CLOCK GENERATOR)

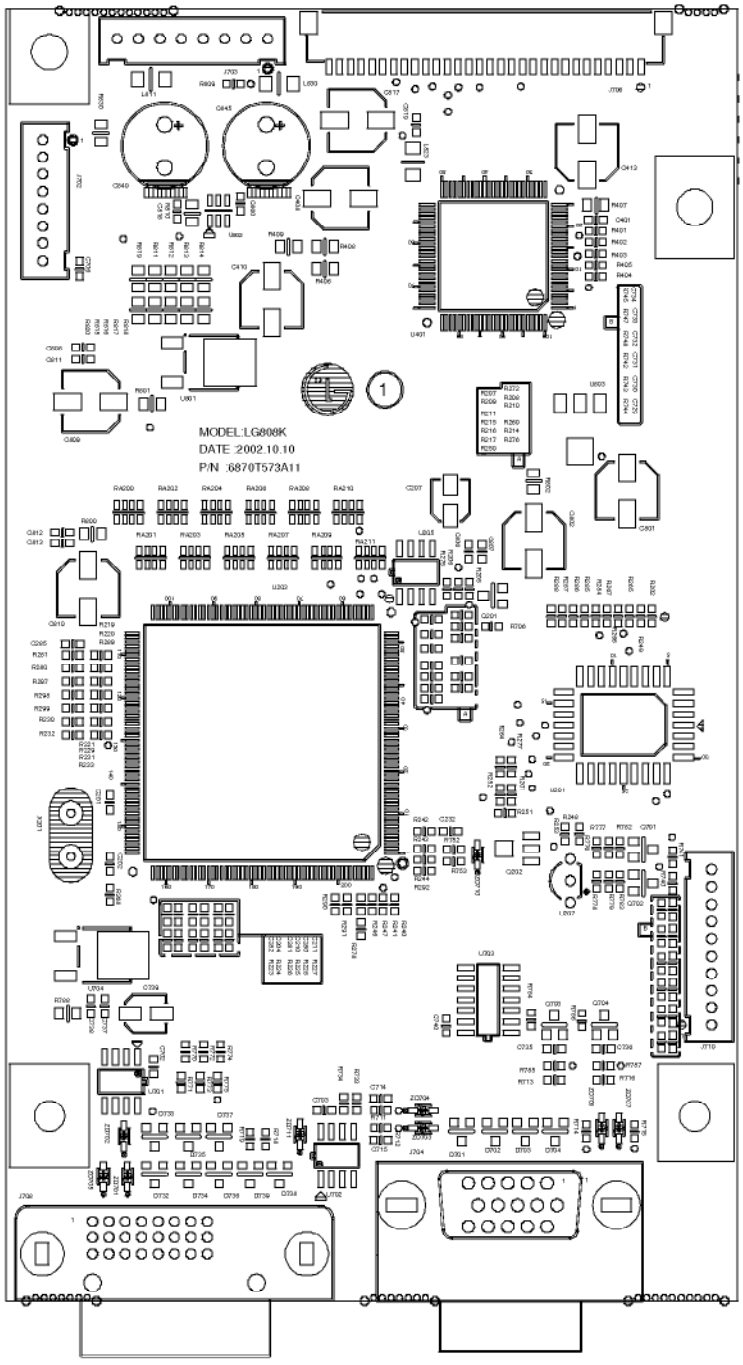


4. TROUBLE IN DPM

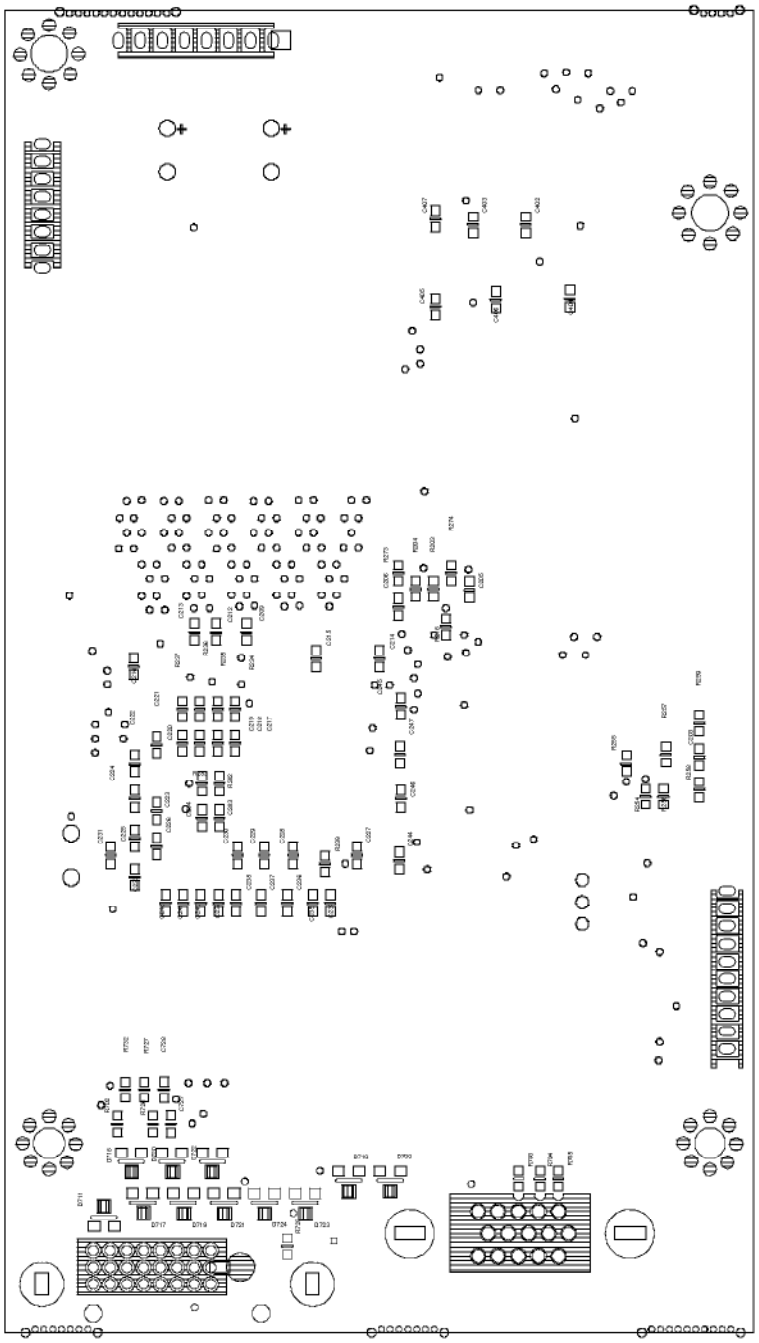


PRINTED CIRCUIT BOARD

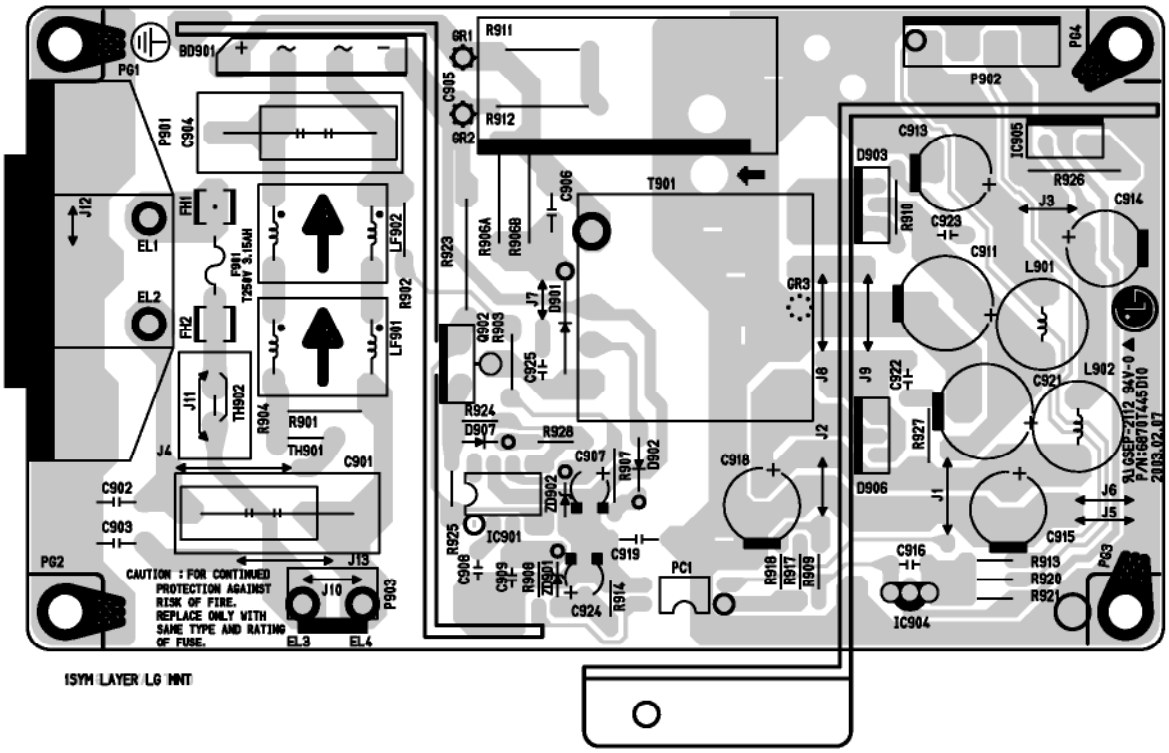
1. MAIN BOARD (Component Side)



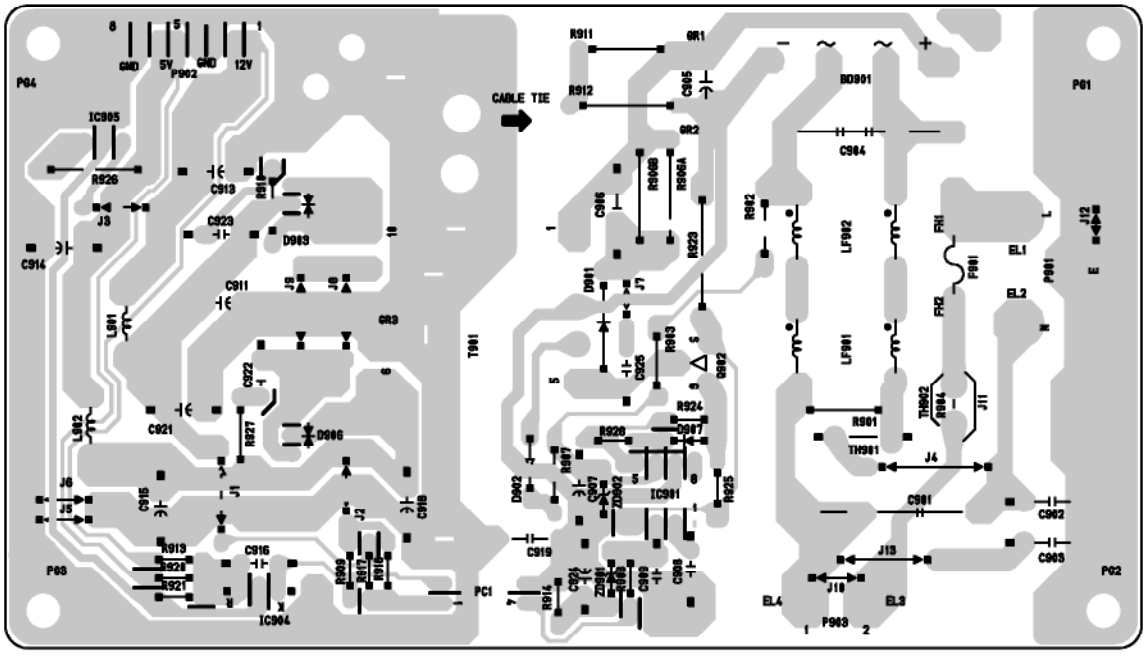
2. MAIN BOARD (Solder Side)



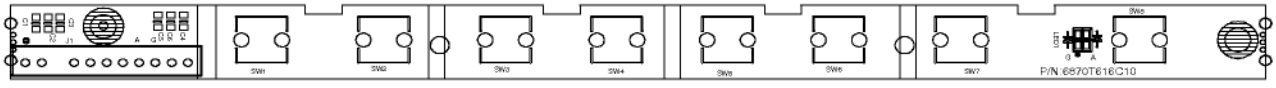
3. POWER BOARD (Component Side)



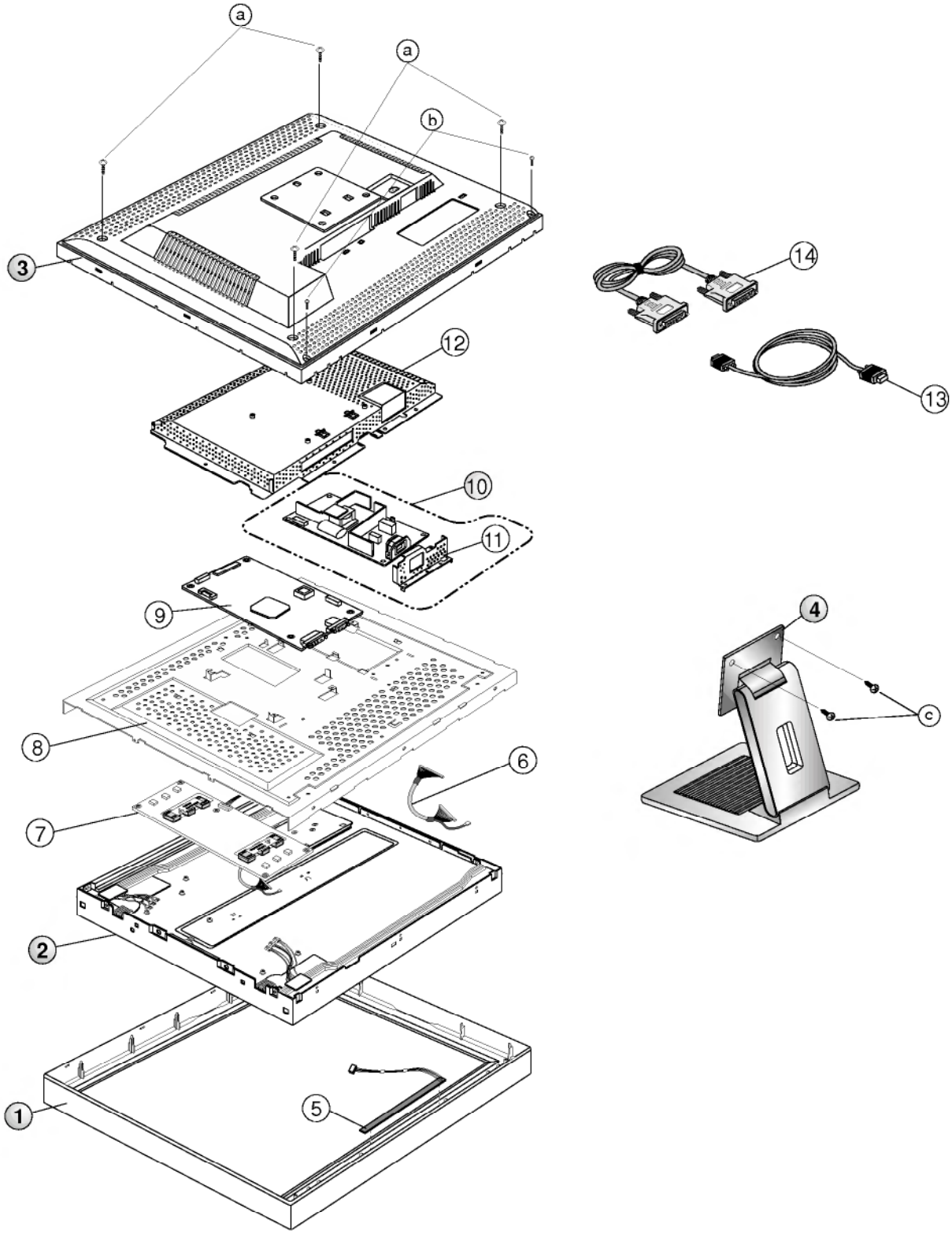
4. POWER BOARD (Solder Side)



5.CONTROL BOARD



EXPLODED VIEW



EXPLODED VIEW PARTS LIST

* **Note:** Safety mark ⚠

Ref. No.	Part No.		Description
1	3091TKL045A		CABINET ASSEMBLY, LD803H BRAND 3090TKL048 ..
2	6304FLP034A		LCD(LIQUID CRYSTAL DISPLAY), LM181E06-A4M1 LG PHILPS TFT COLOR SXGA 18.1" LVDS SMM
3	3809TKL025K		BACK COVER ASSEMBLY, LD803H 3808TKL030A -MX LOCAL(DELL)
4	3043TKK091B		TILT SWIVEL ASSEMBLY, LD803H . PC+ABS M-GRAY
5	6871TST402A		PWB(PCB) ASSEMBLY, SUB, L1800FPK CONTROL TOTAL DELL CL-42
6	6631T11012P		CONNECTOR ASSEMBLY, 30P H-H 100MM UL20276 PANEL LINK LB886F
7	6633TZA008C	⚠	INVERTER ASSEMBLY, ALPS KUBNKM045A 6-LAMPS,18" DELL
	or 6633TZA008H		INVERTER ASSEMBLY, ALPS KUBNKM045A(REV5.0) 6-LAMPS,18" DELL
8	4951TKS078R		METAL ASSEMBLY, FRAME L1800FPK, DELL
9	6871TMT442A		PWB(PCB) ASSEMBLY, MAIN, L1800FPK ALRDG DELL CL-42 TOTAL
10	6871TPT226A		PWB(PCB) ASSEMBLY, POWER, LD803H POWER TOTAL BRAND
11	4814TKK187A		SHIELD, REAR LB886F
12	4950TKK429A		METAL, REAR LB800H
13	6850TD9004F		CABLE, D-SUB, UL 29276-9C(5.8mm) DT 1870MM BLACK(9930) , G/W DM
14	6866TDV004J		CABLE, DVI, UL20276 DT 2000MM BLACK(9930) LG883D DM
	or 6866TDV004M		CABLE, DVI, UL20276 DT 2000MM BLACK(9930) NMV 18" DM
a	1SZZTER001H		SCREW, DRAWING, D3.0 L10.0 MSWR/BK .
b	332-113S		SCREW, DRAWING, D3.0 L12.0 MSWR/BK .
c	332-105G		SCREW, DRAWING, PVS+4*10(MSWR/BK)

REPLACEMENT PARTS LIST

CAUTION: BEFORE REPLACING ANY OF THESE COMPONENTS,
READ CAREFULLY THE **SAFETY PRECAUTIONS** IN THIS MANUAL.
* NOTE : **S** SAFETY Mark ⚠
AL ALTERNATIVE PARTS

DATE: 2003. 05. 06.

*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		MAIN BOARD		
		CAPACITORS		
		C201	0CC180CK41A	18PF 1608 50V 5% R/TP NP0
		C202	0CC180CK41A	18PF 1608 50V 5% R/TP NP0
		C203	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C204	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C205	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C206	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C207	0CH8106F691	10UF 16V 20% 105STD (CYL) R/
		C209	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C210	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C211	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C212	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C213	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C214	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C215	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C216	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C217	0CC680CK41A	68PF 1608 50V 5% R/TP NP0
		C218	0CC680CK41A	68PF 1608 50V 5% R/TP NP0
		C219	0CC680CK41A	68PF 1608 50V 5% R/TP NP0
		C220	0CC330CK41A	33PF 1608 50V 5% R/TP NP0
		C221	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C222	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C223	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C224	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C225	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C226	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C227	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C228	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C229	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C230	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C231	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C232	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C233	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C234	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C235	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C236	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C237	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C238	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C239	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C240	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C241	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C242	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C244	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C245	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C246	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C247	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C280	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C281	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C282	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C283	0CC470CK41A	47PF 1608 50V 5% R/TP NP0
		C284	0CC221CK41A	220PF 1608 50V 5% R/TP NP0
		C401	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C402	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		C403	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C404	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C405	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C406	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C407	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C408	0CH8226F691	22UF 16V 20% 105STD (CYL) R/
		C410	0CE107WF6DC	100UF MVK 16V 20% R/TP(SMD)
		C413	0CE107WF6DC	100UF MVK 16V 20% R/TP(SMD)
		C702	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C703	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C706	0CC221CK41A	220PF 1608 50V 5% R/TP NP0
		C714	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C715	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C727	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C728	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C729	0CC471CK41A	470PF 1608 50V 5% R/TP NP0
		C730	0CC471CK41A	470PF 1608 50V 5% R/TP NP0
		C731	0CC471CK41A	470PF 1608 50V 5% R/TP NP0
		C732	0CC471CK41A	470PF 1608 50V 5% R/TP NP0
		C733	0CC471CK41A	470PF 1608 50V 5% R/TP NP0
		C734	0CC471CK41A	470PF 1608 50V 5% R/TP NP0
		C735	0CC680CK41A	68PF 1608 50V 5% R/TP NP0
		C736	0CC680CK41A	68PF 1608 50V 5% R/TP NP0
		C737	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C738	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C739	0CH8106F691	10UF 16V 20% 105STD (CYL) R/
		C740	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C801	0CE107WF6DC	100UF MVK 16V 20% R/TP(SMD)
		C802	0CE107WF6DC	100UF MVK 16V 20% R/TP(SMD)
		C806	0CC102CK41A	1000PF 1608 50V 5% R/TP NP0
		C807	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C808	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C809	0CH8476F691	47UF 16V 20% 105STD (CYL) R/
		C810	0CH8476F691	47UF 16V 20% 105STD (CYL) R/
		C811	0CC102CK41A	1000PF 1608 50V 5% R/TP NP0
		C812	0CC102CK41A	1000PF 1608 50V 5% R/TP NP0
		C813	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C817	0CE107WF6DC	100UF MVK 16V 20% R/TP(SMD)
		C818	0CC102CK41A	1000PF 1608 50V 5% R/TP NP0
		C819	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C840	0CE477EH618	470UF KMG 25V M FL TP 5
		C845	0CE477EH618	470UF KMG 25V M FL TP 5
		C860	0CK105CD56A	1UF 1608 10V 10% R/TP X7R
		DIODEs		
		D701	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D702	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D703	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D704	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D709	0DS301109AA	MMBD301LT1 TP MOTOROLA SOT23
		D710	0DS301109AA	MMBD301LT1 TP MOTOROLA SOT23
		D711	0DS301109AA	MMBD301LT1 TP MOTOROLA SOT23
		D717	0DS226009AA	KDS226 TP KEC SOT-23 80V 30

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		D718	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D719	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D720	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D721	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D722	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D723	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D724	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D732	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D733	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D734	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D735	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D736	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D737	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D738	0DZ845109AB	BZX84C5V1 TP G.I SOT23 0.35W
		D739	0DZ845109AB	BZX84C5V1 TP G.I SOT23 0.35W
		ZD701	0DZ560009GB	BZT52C5V6S DIODES R/TP SOD32
		ZD702	0DZ560009GB	BZT52C5V6S DIODES R/TP SOD32
		ZD703	0DZ560009GB	BZT52C5V6S DIODES R/TP SOD32
		ZD704	0DZ560009GB	BZT52C5V6S DIODES R/TP SOD32
		ZD705	0DZ560009GB	BZT52C5V6S DIODES R/TP SOD32
		ZD706	0DZ560009GB	BZT52C5V6S DIODES R/TP SOD32
		ZD707	0DZ560009GB	BZT52C5V6S DIODES R/TP SOD32
		ZD710	0DZ560009GB	BZT52C5V6S DIODES R/TP SOD32
		ZD711	0DZ560009GB	BZT52C5V6S DIODES R/TP SOD32
	ICs			
		U201	0IZZTSZ273A	ATMEL/STM 32PIN ST OTP L1800
		U203	0IPRPGN005A	GM5120 GENESIS 208P,PQFP TRA
		U205	0IMMRSS040C	S524A60X51(SCT0) SAMSUNG ELE
		U207	0IKE702900D	KIA7029AP TO-92 TP 2.9V DETE
		U401	0ILNRTH001A	THC63LVD823 THINE MICROSYSTE
		U701	0ISS524202B	S524A40X21(SCT0) SAMSUNG ELE
		U702	0ISS524202B	S524A40X21(SCT0) SAMSUNG ELE
		U703	0ISTLFA058A	74F14SCX FAIRCHILD 14P,SOIC
		U704	0ISS780500H	KA78M05-R 3P,D-PAK TP 5V 0.5
		U801	0IRH033200A	BA033FP-E2 MOLD-3 TP REGULAT
		U802	0TFVI80036A	SI3861DV VISHAY R/TP TSOP-6
		U803	0IPMGFA003B	RC1117S-2.5 FAIRCHILD SOT-22
	COILs & COREs			
		L811	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L823	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L830	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
	TRANSISTOR			
		Q201	0TR162309CA	KSC1623 TP SAMSUNG SOT23 NP
		Q701	0TR390609FA	KST3906-MTF TP SAMSUNG SOT2
		Q702	0TR390609FA	KST3906-MTF TP SAMSUNG SOT2
		Q703	0TR390409AE	FAIRCHILD KST3904(LGEMTF) TP
		Q704	0TR390409AE	FAIRCHILD KST3904(LGEMTF) TP
	RESISTORs			
		R201	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R203	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R204	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R205	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R206	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R207	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP

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		R208	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R209	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R210	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R211	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R214	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R215	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R216	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R217	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R218	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R219	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R221	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R223	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R224	0RJ1200D677	120 OHM 1/10 W 5% 1608 R/TP
		R225	0RJ1200D677	120 OHM 1/10 W 5% 1608 R/TP
		R226	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R227	0RJ1200D677	120 OHM 1/10 W 5% 1608 R/TP
		R228	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R234	0RJ0472D677	47 OHM 1/10 W 5% 1608 R/TP
		R235	0RJ0472D677	47 OHM 1/10 W 5% 1608 R/TP
		R236	0RJ0472D677	47 OHM 1/10 W 5% 1608 R/TP
		R237	0RJ0332D677	33 OHM 1/10 W 5% 1608 R/TP
		R239	0RJ1001D477	1K OHM 1/10 W 1% 1608 R/TP
		R242	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R243	0RJ3302D677	33K OHM 1/10 W 5% 1608 R/TP
		R246	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R247	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R249	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R250	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R252	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R255	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R256	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R257	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R258	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R259	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R260	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R272	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R273	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R274	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R275	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R276	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R277	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R282	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R283	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R289	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R290	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R291	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R401	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R402	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R404	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R405	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R407	0RH0000D622	0 1/10W P-TYPE TAPPING
		R408	0RH0000D622	0 1/10W P-TYPE TAPPING
		R409	0RH0000D622	0 1/10W P-TYPE TAPPING
		R702	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R703	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R704	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R705	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R706	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R711	0RJ0332D677	33 OHM 1/10 W 5% 1608 R/TP
		R712	0RJ0332D677	33 OHM 1/10 W 5% 1608 R/TP
		R713	0RJ0472D677	47 OHM 1/10 W 5% 1608 R/TP
		R714	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R715	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R716	0RJ0472D677	47 OHM 1/10 W 5% 1608 R/TP
		R718	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R719	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R726	0RJ0332D677	33 OHM 1/10 W 5% 1608 R/TP
		R727	0RJ0332D677	33 OHM 1/10 W 5% 1608 R/TP
		R729	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		R732	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R733	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R734	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R740	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		R741	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		R742	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R743	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R744	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R745	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R747	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R748	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R752	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R753	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R770	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R771	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R772	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R773	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R774	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R775	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R776	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R777	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R778	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R779	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R784	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R785	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R786	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R787	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R788	0RH0000D622	0 1/10W P-TYPE TAPPING
		R800	0RH0000D622	0 1/10W P-TYPE TAPPING
		R801	0RH0000D622	0 1/10W P-TYPE TAPPING
		R802	0RH0000D622	0 1/10W P-TYPE TAPPING
		R809	0RJ2202D677	22K OHM 1/10 W 5% 1608 R/TP
		R810	0RH5600D622	560 1/10W 5 D.R/TP
		R811	0RH0332D622	33 1/10W 5 D.R/TP
		R812	0RH0332D622	33 1/10W 5 D.R/TP
		R813	0RH0332D622	33 1/10W 5 D.R/TP
		R814	0RH0332D622	33 1/10W 5 D.R/TP
		R815	0RH0332D622	33 1/10W 5 D.R/TP
		R816	0RH0332D622	33 1/10W 5 D.R/TP
		R817	0RH0332D622	33 1/10W 5 D.R/TP
		R818	0RH0332D622	33 1/10W 5 D.R/TP
		R819	0RH0332D622	33 1/10W 5 D.R/TP
		R820	0RH0332D622	33 1/10W 5 D.R/TP
		RA200	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/TP
		RA201	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/TP
		RA202	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/TP
		RA203	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/TP
		RA204	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/TP
		RA205	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/TP
		RA206	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/TP
		RA207	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/TP
		RA208	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/TP
		RA209	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/TP
		RA210	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/TP
		RA211	0RHZTCZ001A	100 OHM 1/16 W 5% 3215 R/TP

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		OTHERs		
		X201	6212AA2004B	HC-49U TXC 20.0MHZ +/- 30 PP
		POWER BOARD		
⚠		BD901	0DD360000DA	D3SBA60 BK SHINDENGEN 600V
⚠		C901	0CBZTBU002B	BULK PCX2 335 474K
⚠		C902	0CKZTBU006B	NK E 332M 250V BK10.0 DA2GYE
⚠		C903	0CKZTBU006B	NK E 332M 250V BK10.0 DA2GYE
⚠		C904	0CBZTBU002A	BULK PCX2 335 224K
		C905	0CZZTAB002C	KMF 18*40 SYE / SWE 400V 120
		C906	0CK10302945	0.01UF 2KV Z F TR
		C907	0CE476EK638	47UF KMG 50V M FM5 TP 5
		C908	0CQ2721N419	2700PF 100V J PE NI TP
		C909	0CK1020K515	1000PF 50V K B TR
		C911	0CE228EF630	2200UF KMG 16V M FM5 BULK
		C913	0CE108BF630	1000UF KME 16V M FM5 BULK
		C914	0CE228ED630	2200UF KMG,RD 10V 20% BULK F
		C915	0CE228ED630	2200UF KMG,RD 10V 20% BULK F
		C916	181-288L	MKT 100V 823JTR PHS26823
		C918	0CE228ED630	2200UF KMG,RD 10V 20% BULK F
⚠		C919	0CKZTBU006B	NK E 332M 250V BK10.0 DA2GYE
		C921	0CE228EF630	2200UF KMG 16V M FM5 BULK
		C922	0CKZTTA002E	EKR3A102K09FK5 SAMWHA 1KV 10
		C923	0CKZTTA002E	EKR3A102K09FK5 SAMWHA 1KV 10
		C924	0CE336BH638	33UF KME 25V M FM5 TP5
		D901	0DD400709CB	UF4007 TP G.I DO204AL 1000V
		D902	0DR400409AB	UF4004 TP G.I DO204AL 400V 1
		D903	0DRIR00011B	16CTQ100 I.R ST TO220 100V 1
		D906	0DRIR00021A	30CTQ060 I.R ST TO220 60V 30
		D907	0DS113309AA	1SS133 TP ROHM KOREA DO34 90
⚠		F901	0FZZTTH001D	TIME LAG HBC 3.15A/250V,215
		FH1	430-858C	AFC-520 BAE EUN TA
		FH2	430-858C	AFC-520 BAE EUN TA
		IC901	0IPMGIH001A	ICE2AS01 INFINEON 8P,DIP ST
		IC904	0ISS431000A	KA431AZ (LM431AZ)
		IC905	0ISS780500F	KA7805
		L901	150-A85F	LX31 GET BAR CHOKE,3.3UH,LB8
		L902	150-A85F	LX31 GET BAR CHOKE,3.3UH,LB8
⚠		LF901	6200TZZ001A	- GO BK L/FILTER,9MH,LB886F
⚠		LF902	6200TZZ001A	- GO BK L/FILTER,9MH,LB886F
		P901	6620TKB002A	BAE EUN AC UNIVERSAL 3PIN BL
⚠		PC1	0ILI817000E	LTV-817M-V(B) 4P BK PHOTO C
		Q902	0TFFN10004A	INFINEON SPP11N60C2 ST TO220
		R901	0RD6803A609	680K OHM 1/2 W (7.0) 5% TA52
		R902	0RD3902A609	39K OHM 1/2 W (7.0) 5% TA52
		R903	0RD3902A609	39K OHM 1/2 W (7.0) 5% TA52
		R906A	0RX5102J609	51KOHM 1 W 5% TA52
		R906B	0RX5102J609	51KOHM 1 W 5% TA52
		R907	0RD0102Q609	10 1/4W(3 5% TA52
		R908	0RD0222Q609	22 1/4W(3 5% TA52
		R909	0RD1001Q609	1K 1/4W(3 5% TA52
		R910	0RD0431A609	4.3 OHM 1/2 W (7.0) 5% TA52
		R911	0RD1004A609	1.0M OHM 1/2 W (7.0) 5% TA52
		R912	0RD1004A609	1.0M OHM 1/2 W (7.0) 5% TA52
		R913	0RN1102F409	11K 1/6W 1% TA52
		R914	0RD1002Q609	10K 1/4W(3 5% TA52
		R917	0RD1201Q609	1.20K 1/4W(3 5% TA52
		R918	0RD1000Q609	100 1/4W(3 5% TA52
		R920	0RN4702F409	47K 1/6W 1% TA52
		R921	0RN2701F409	2.7K OHM 1/6 W 1.00% TA52
		R923	0RB0330K607	0.33 OHM 2 W 5% TA62

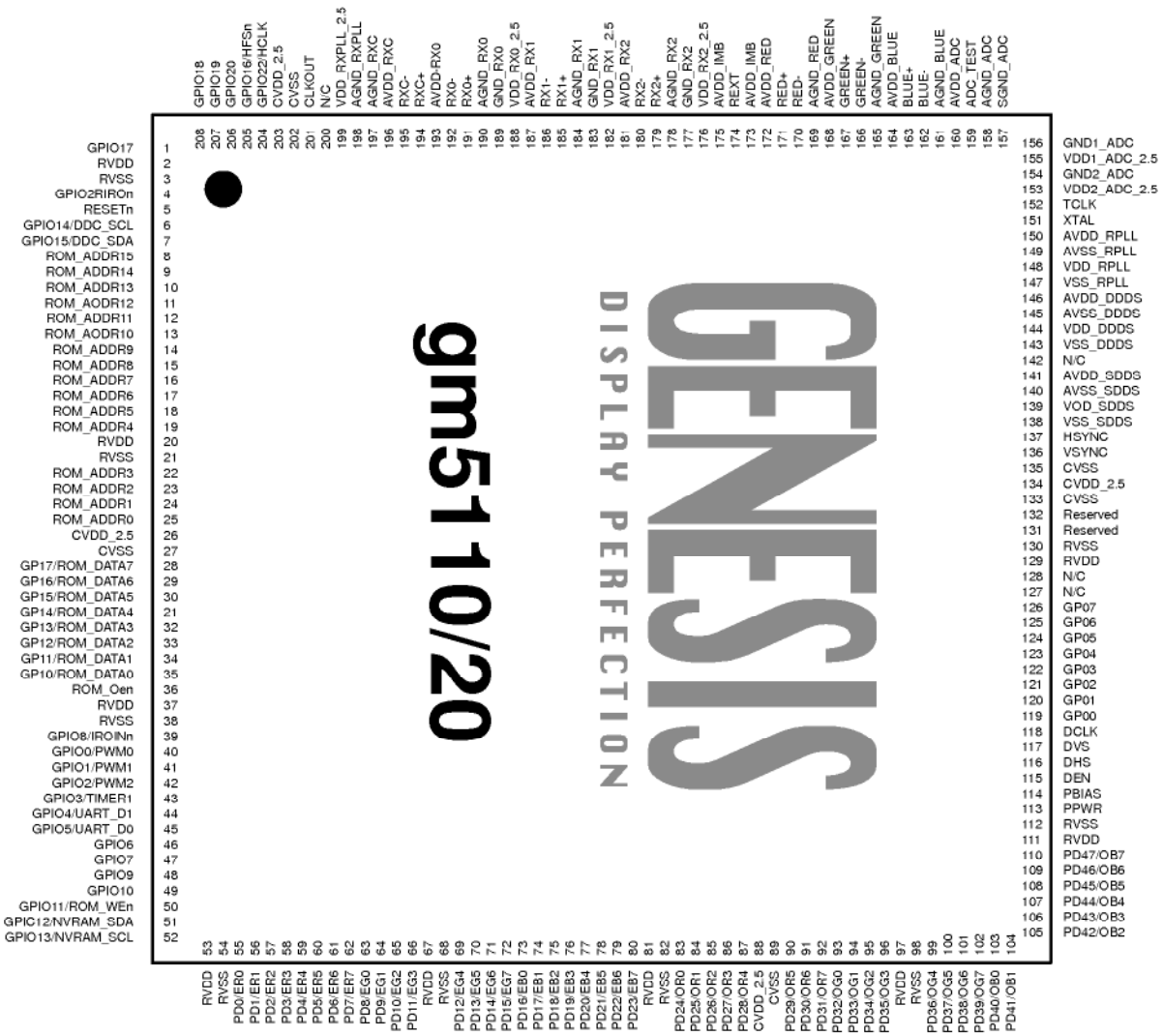
DATE: 2003. 05. 06.

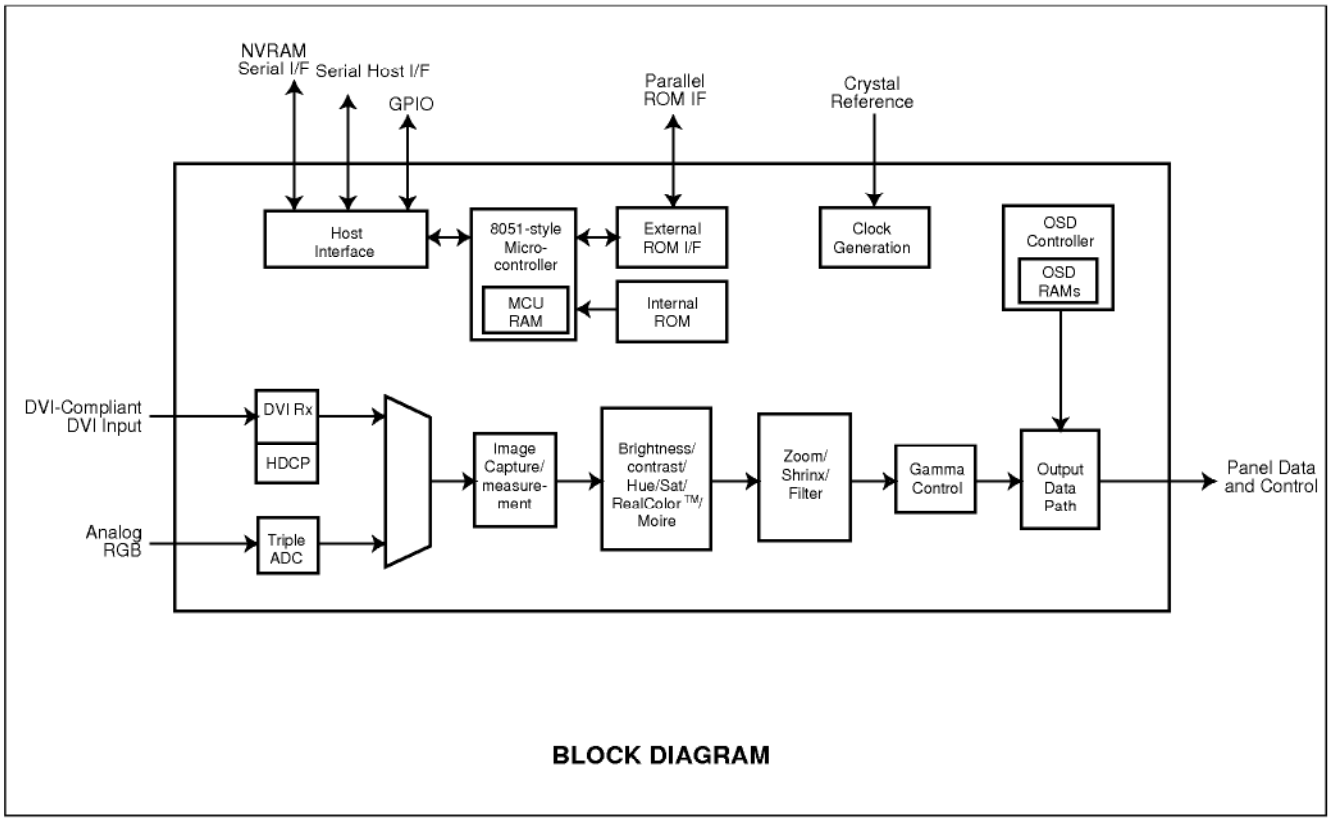
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R924	0RD0752Q609	75 1/4W(3 5% TA52
		R925	0RD1002Q609	10K 1/4W(3 5% TA52
		R926	0RN0471H609	4.7 OHM 1/2 W 5% TA52
		R927	0RD0102A609	10 OHM 1/2 W (7.0) 5% TA52
		R928	0RD0202Q609	20 1/4W(3 5% TA52
⚠		T901	6170TMZ125B	EER3016 340UH V-10PIN LB886F
		TH902	6322TA080AA	TP8D13 DAEWOO +/- 15% 110/2
		ZD901	0DZ470009BC	GDZ4.7B TP GRANDE DO34 0.5W
		CONTROL BOARD		
		LED1	0DLLT0148AA	LITEON LTST-C195KGJSKT R/TP
		SW1	140-058E	SKHV10910B LGEC NON 12V 20A
		SW2	140-058E	SKHV10910B LGEC NON 12V 20A
		SW3	140-058E	SKHV10910B LGEC NON 12V 20A
		SW4	140-058E	SKHV10910B LGEC NON 12V 20A
		SW5	140-058E	SKHV10910B LGEC NON 12V 20A
		SW6	140-058E	SKHV10910B LGEC NON 12V 20A
		SW7	140-058E	SKHV10910B LGEC NON 12V 20A
		SW8	140-058E	SKHV10910B LGEC NON 12V 20A

PIN CONFIGURATION

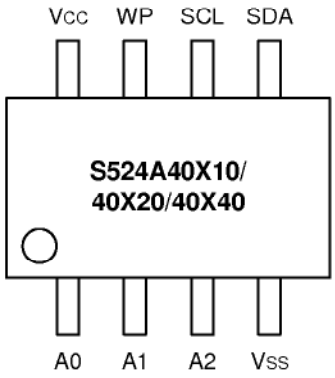
GM5120 GENESIS 208P

gm5110/20 Pin Out Diagram





BLOCK DIAGRAM



NOTE: The S524A40X10/40X20/40X40 is available in 8-pin DIP, SOP, and TSSOP package.

Figure 2-2. Pin Assignment Diagram

Table 2-1. S524A40X10/40X20/40X40 Pin Descriptions

Name	Type	Description	Circuit Type
A0, A1, A2	Input	Input pins for device address selection. To configure a device address, these pins should be connected to the V_{CC} or V_{SS} of the device. These pins are internally pulled down to V_{SS}.	1
V_{SS}	—	Ground pin.	—
SDA	I/O	Bi-directional data pin for the I^2C-bus serial data interface. Schmitt trigger input and open-drain output. An external pull-up resistor must be connected to V_{CC}. Typical values for this pull-up resistor are 4.7 kΩ (100 kHz) and 1 kΩ (400 kHz).	3
SCL	Input	Schmitt trigger input pin for serial clock input.	2
WP	Input	Input pin for hardware write protection control. If you tie this pin to V_{CC}, the write function is disabled to protect previously written data in the entire memory; if you tie it to V_{SS}, the write function is enabled. This pin is internally pulled down to V_{SS}.	1
V_{CC}	—	Single power supply.	—

NOTE: See the following page for diagrams of pin circuit types 1, 2, and 3.

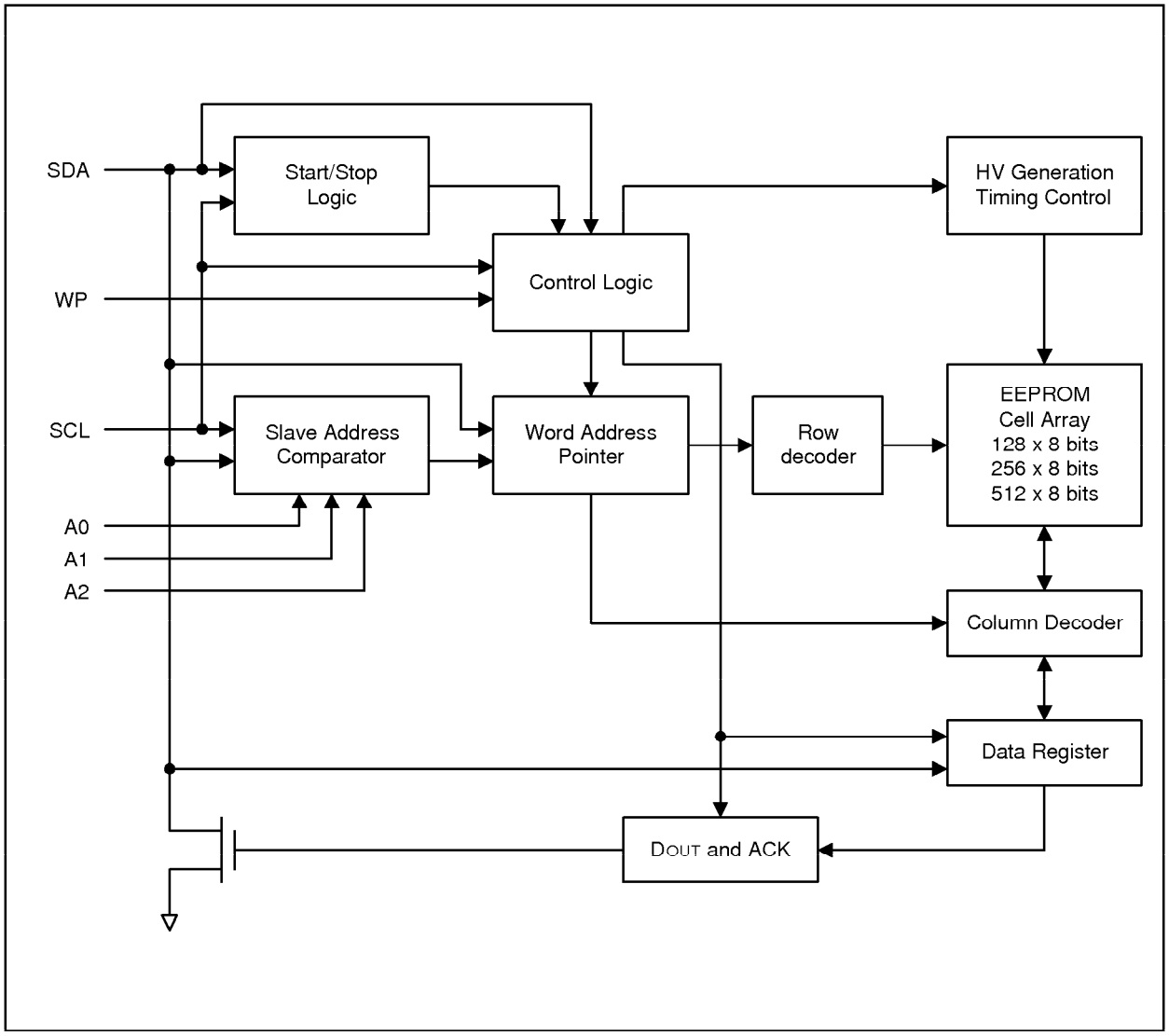
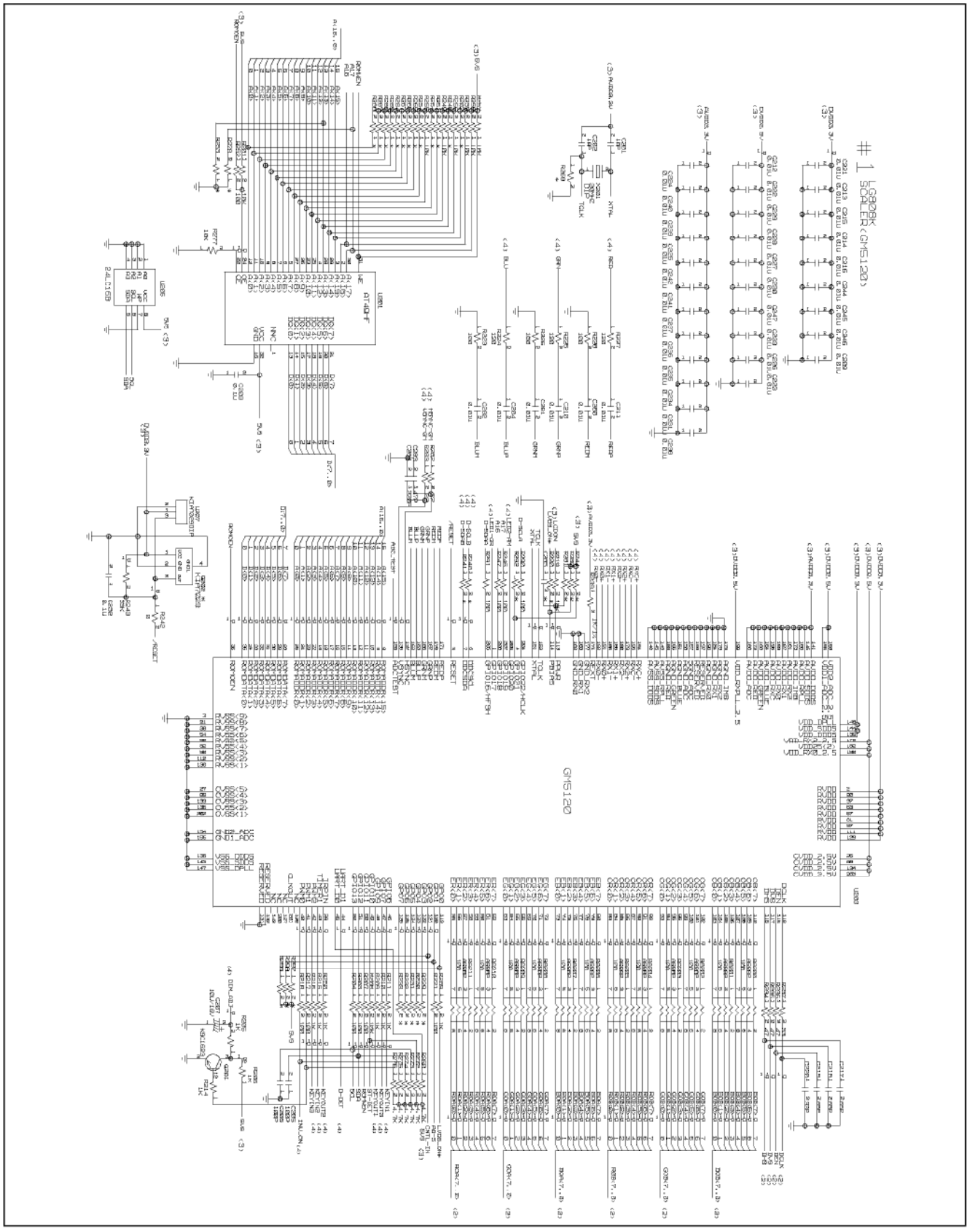


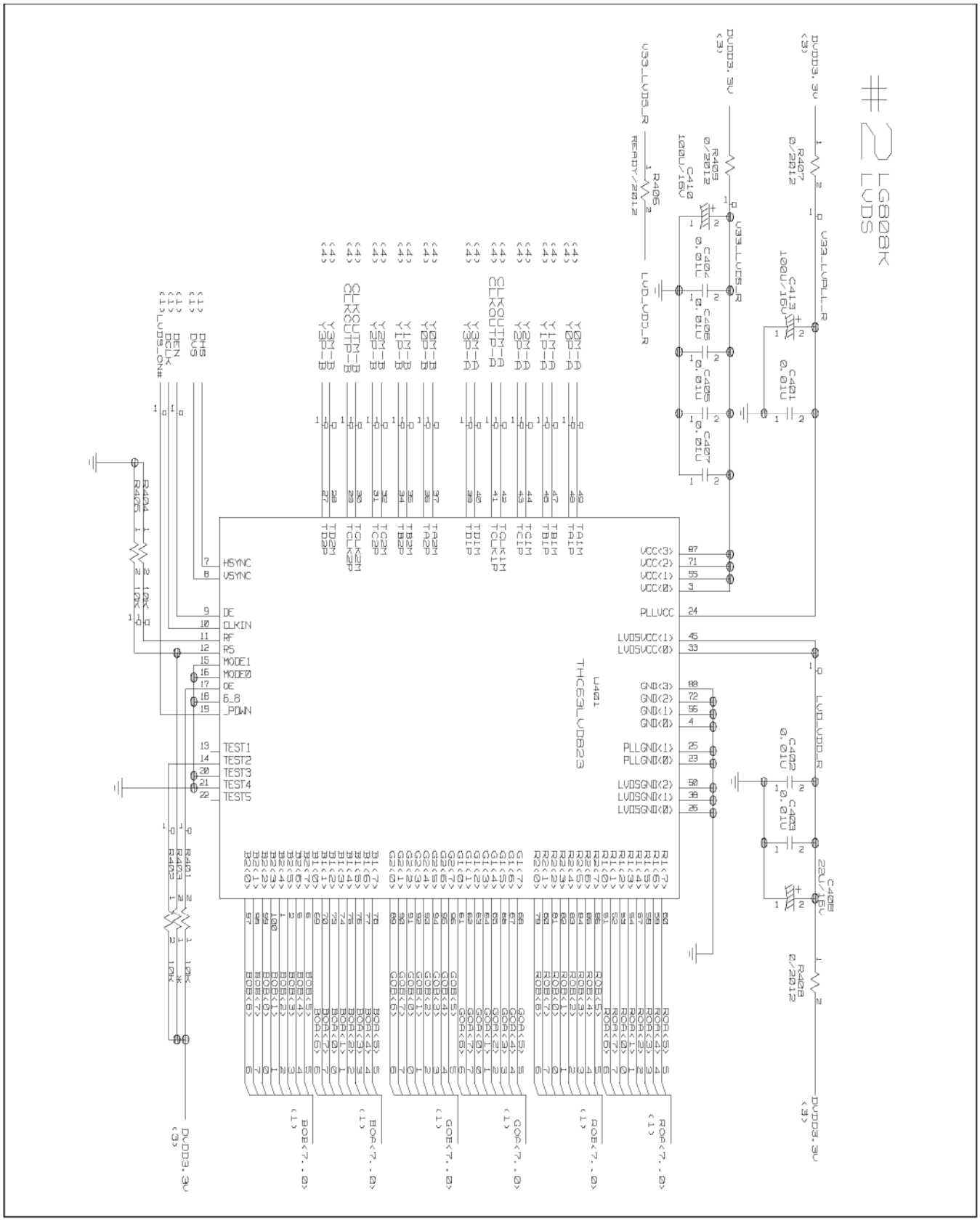
Figure 2-1. S524A40X10/40X20/40X40 Block Diagram

SCHEMATIC DIAGRAM

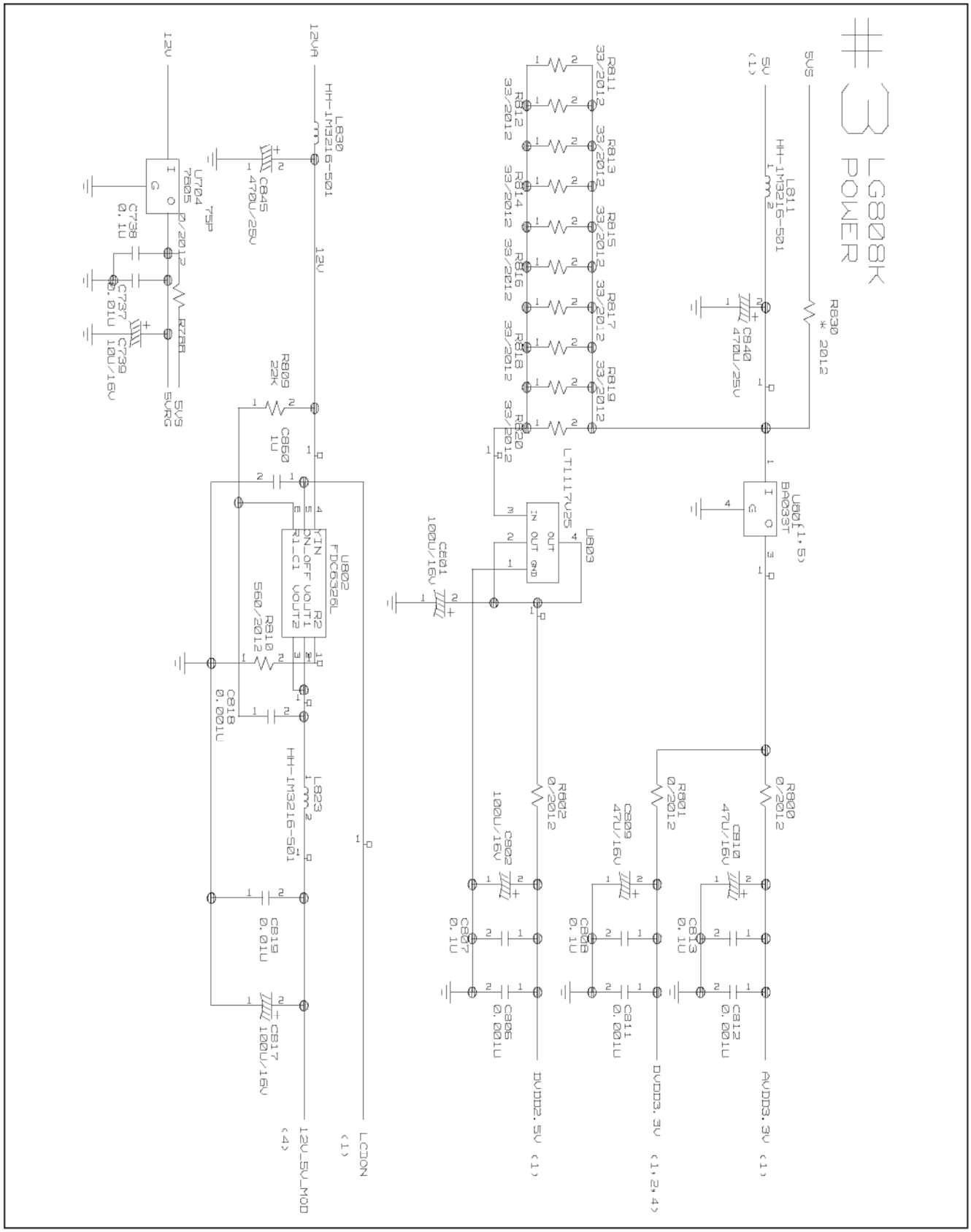
1. GM5120



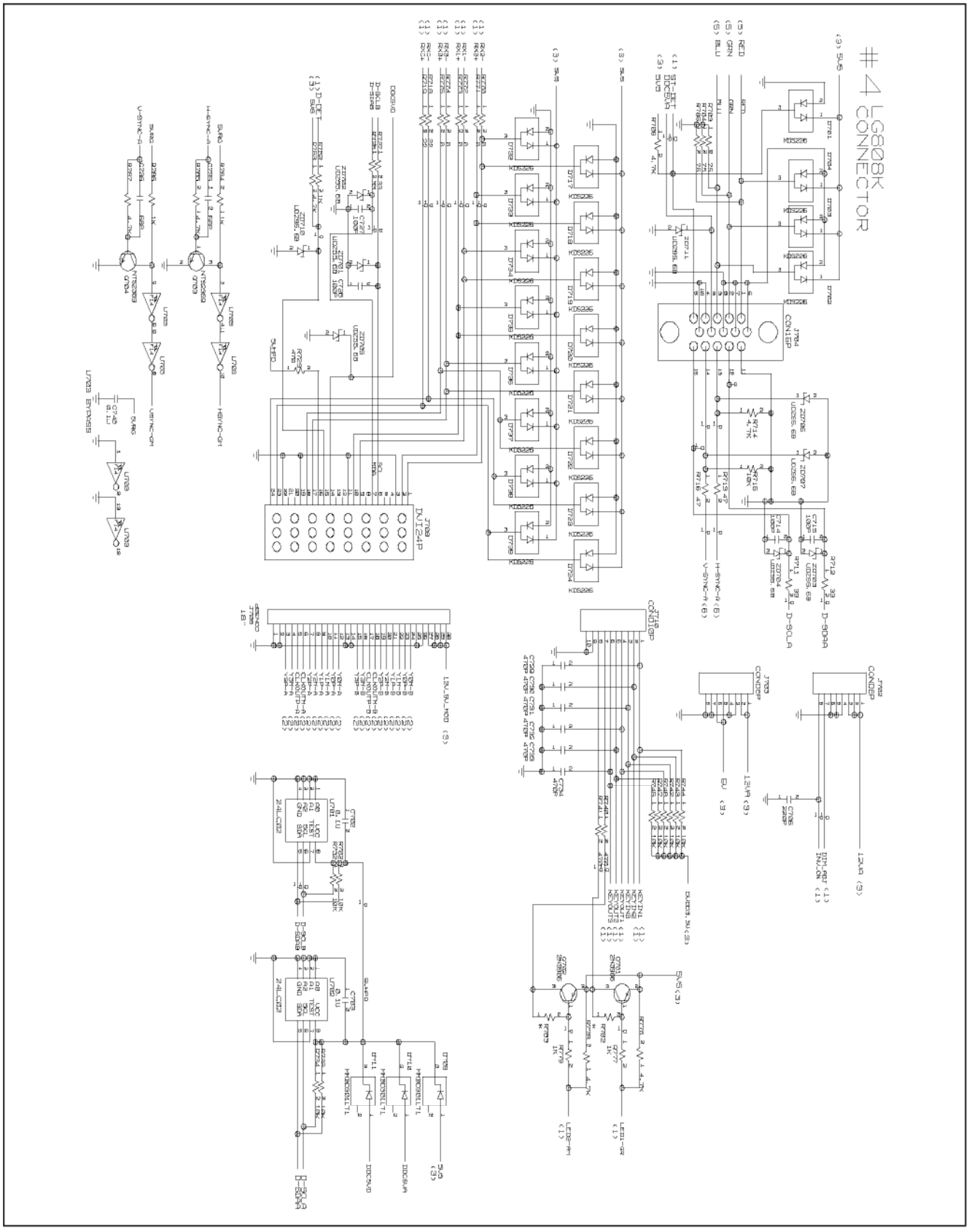
2. LVDS


#2 LG808K LVDS
THC63LVD823
U4001
HSYNC
VSYNC
DE
CLKIN
MF
R5
MODE1
MODE0
OE
6_8
_PDWN
TEST1
TEST2
TEST3
TEST4
TEST5
DHS
DVS
DEN
DCLK
LVDS_ON#
PLLVCC
LVDSVCC(1)
LVDSVCC(0)
PLLGND(1)
PLLGND(0)
LVDSGND(2)
LVDSGND(1)
LVDSGND(0)
DVDD3.3V
V33_LVDSPLL_R
V33_LVDS_R
LVD_VDD_R
R407 0/2012
R405 0/2012
R408 0/2012
C410 100U/16V
C413 100U/16V
C408 22U/16V
C401 0.01U
C402 0.01U
C403 0.01U
C404 0.01U
C405 0.01U
C406 0.01U
C407 0.01U
R404 10K
R401 10K
R402 10K
R403 *
Y0M-A
Y0P-A
Y1M-A
Y1P-A
Y2M-A
Y2P-A
CLKOUTM-A
CLKOUTP-A
Y3M-A
Y3P-A
Y0M-B
Y0P-B
Y1M-B
Y1P-B
Y2M-B
Y2P-B
CLKOUTM-B
CLKOUTP-B
Y3M-B
Y3P-B
R0A<7..0>
G0A<7..0>
B0A<7..0>
R0B<7..0>
G0B<7..0>
B0B<7..0>

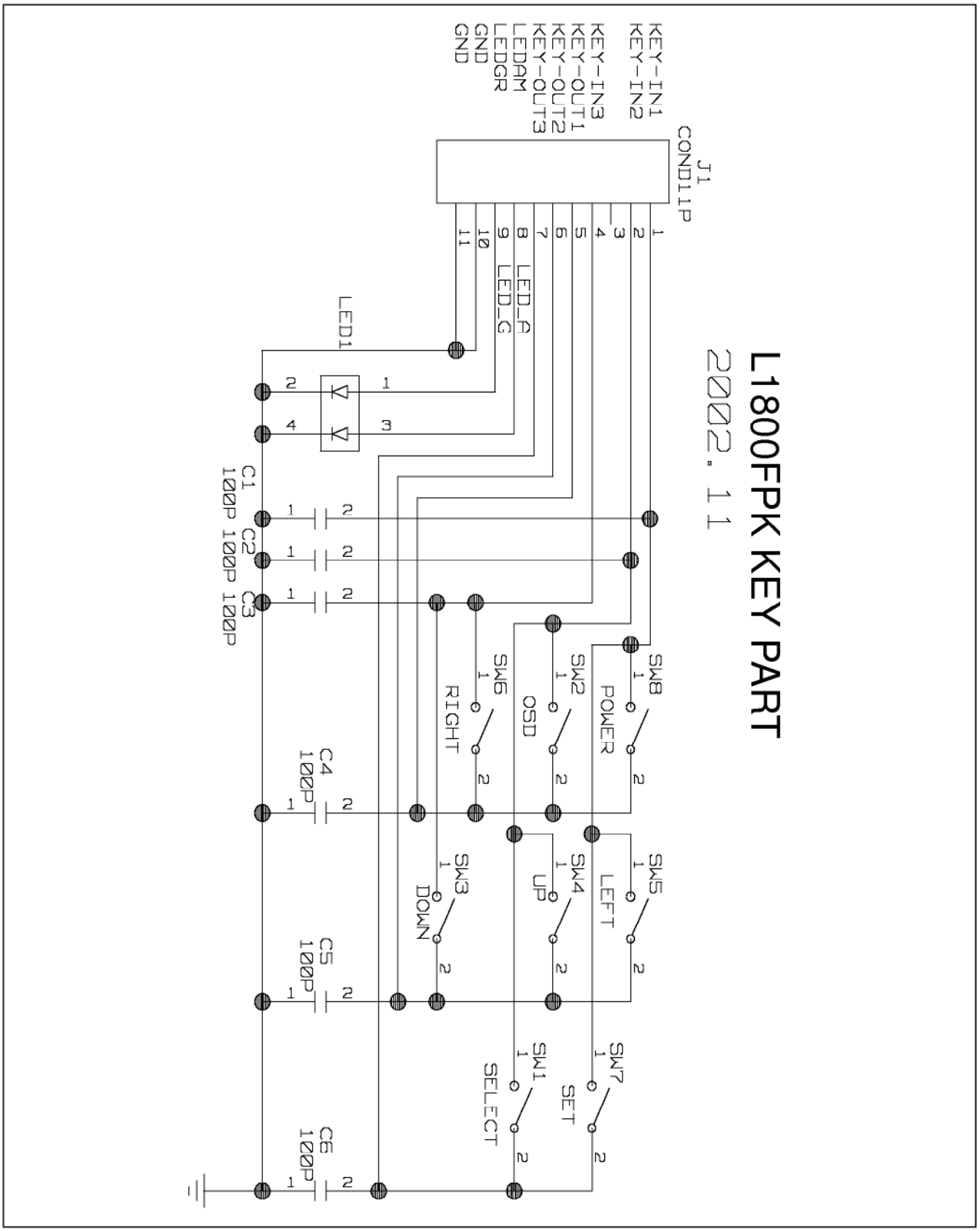
3. DC/DC


#3 LG808K POWER
5VS
R830 * 2012
5V (1)
L811 HH-1M3216-501
C840 470U/25V
U801(1,5) BA033T
R811 33/2012
R812 33/2012
R813 33/2012
R814 33/2012
R815 33/2012
R816 33/2012
R817 33/2012
R818 33/2012
R819 33/2012
R820 33/2012
LT1117V25
U803
C801 100U/16V
R800 0/2012
C810 47U/16V
C813 0.1U
C812 0.001U
AVDD3.3V (1)
R801 0/2012
C809 47U/16V
C808 0.1U
C811 0.001U
DVDD3.3V (1,2,4)
R802 0/2012
C802 100U/16V
C807 0.1U
C805 0.001U
DVDD2.5V (1)
12VA
L830 HH-1M3216-501
C845 470U/25V
12V
U704 7805
C738 0.1U
C737 0.01U
C739 10U/16V
75P
R828 0/2012
5VS
5VRG
R809 22K
C850 1U
U802 FDC6326L
VIN ON-OFF VOUT1 R1-C1 VOUT2 R2
R810 560/2012
C818 0.001U
L823 HH-1M3216-501
C819 0.01U
C817 100U/16V
12V_5V_MOD (4)
LCDON (1)

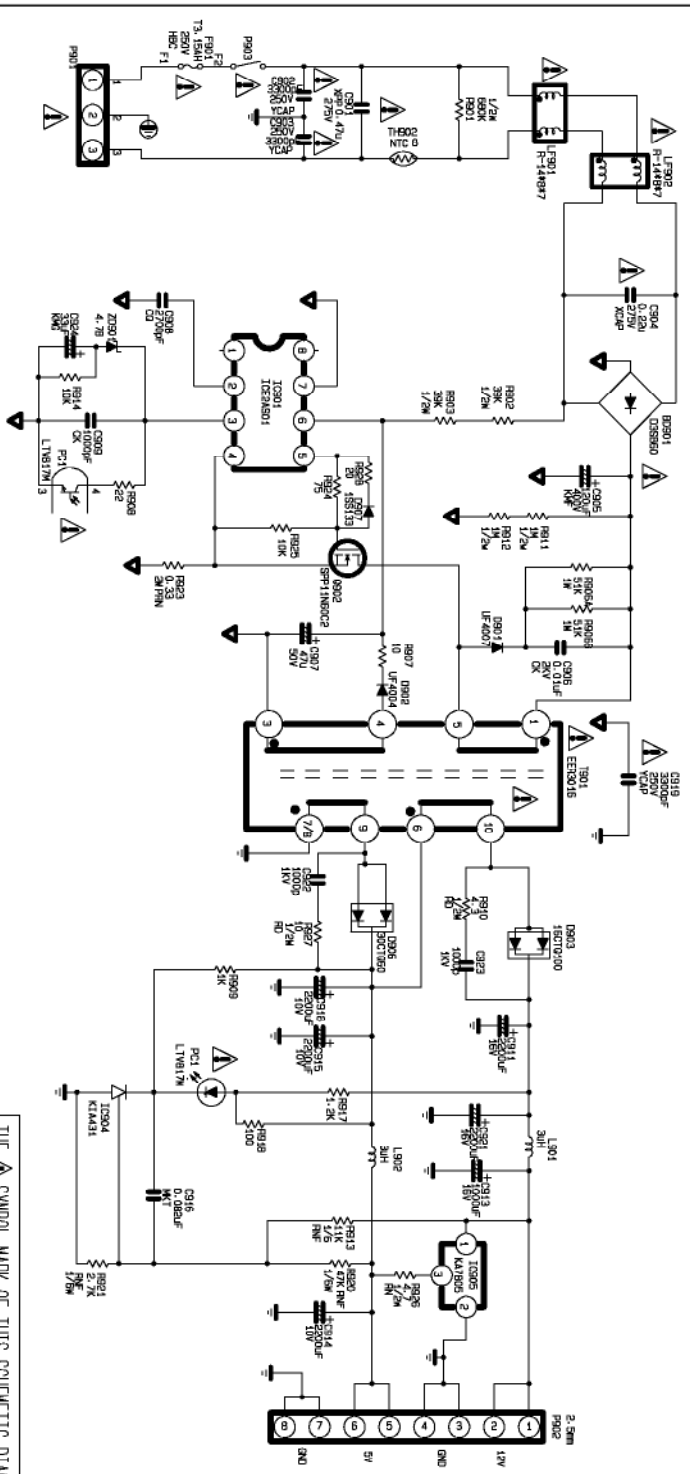
4. CONNECTOR



5. CONTROL KEY



6. POWER



Internal Power Circuit

THE ⚠ SYMBOL MARK OF THIS SCHEMETIC DIAGRAM INCORPORATES SPECIAL FEATURES IMPORTANT FOR PROTECTION FROM X-RADIATION. FILRE AND ELECTRICAL SHOCK HAZARDS. WHEN SERVICING IT IS ESSENTIAL THAT ONLY MANUFATURES SPECIFIED PARTS BE USED FOR THE CRITICAL COMPONENTS IN THE ⚠ SYMBOL MARK OF THE SCHEMETIC.

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